THE NEW YORK

JOURNAL OF MEDICINE.

FOR NOVEMBER, 1846.

PART FIRST.

Original Communications.

ART. I.—*Cases of Encephaloid Disease, with Remarks.* By EDSON CARR, M. D., of Canandaigua, N. Y.

THE following cases formed the subject of an address delivered before the Ontario County Medical Society, at its annual meeting in July last, and at the request of its members, they are given to the profession. They present some points of interest to the general practitioner, aside from the circumstance that they belong to a class of affections not often met with in the ordinary course of private practice. If the perusal of this article shall be found tedious to the experienced observer on account of the minuteness of its details, it should be considered that it was prepared, less for him, than for the younger members of the profession, and they themselves should be content, since what we most need in the present state of medical science, if we would advance it to a higher state of perfection, is an accumulation of just such facts.

CASE I.—Alvah White, aged 49 years, of diminutive stature, a shoemaker by trade, called on me for advice early in the spring of 1844. He had a painful affection of his left foot and leg.

In the fall of 1842, he first complained of pain and numbness through the ball of his great toe and over the dorsum of the foot, which gradually extended up the fore part of the leg. This was soon followed by a total loss of power in the flexor muscles of the foot, and the extensors of the toes, together with a wasting of all the muscles supplied with filaments from the fibular nerve.

The extensors of the foot, as well as the flexors of the toes, remained in a state of integrity.

On a careful examination of the limb, no tumor or soreness could be discovered in the whole course of the track of the sciatic nerve, although from some cause it was quite evident that the functions of the fibular branch were suspended.

In this condition he visited New York and consulted Dr. Mott, who attributed the affection to his having been confined to his bench in such

a position as to have paralyzed the muscles. He proposed to remove a portion of the tendon of the tibialis anticus with the view of shortening it, and thereby elevating the foot so as to bring it into a more convenient position. It should be remembered, however, that this was during the prevalence of the general mania among surgeons for dividing muscles and tendons for the cure of all manner of deformities. The proposition was declined, and he returned home to his work, the pain and uneasiness in the meantime increasing to such a degree as almost to deprive him of rest and ability to labor.

Soon after his return, a slight tenderness on pressure was discovered deep in the popliteal space. A tumor next made its appearance in the ham, which rapidly increased, so as to fill up the popliteal space. The leg became partially flexed on the thigh, and in this condition he visited Boston in the summer of 1845. Finding no relief he returned home, nearly exhausted with pain and fatigue.

I saw him late in the fall, when the tumor had begun to extend itself up the thigh, where it had become distinctly lobulated, and elastic to the feeling.

In this condition he was anxious to have the limb amputated; but the indications of malignant disease were at this time so strongly marked that I felt bound to decline the operation. He died on the 7th of March, 1846.

On post mortem examination, an incision was carried from the lower edge of the gluteus maximus to the middle of the calf of the leg. The integuments were reflected, exposing the tumor, which occupied the entire popliteal space. It was enclosed by a fibrous capsule, having two or three nearly circular openings, through which lobules of a medullary formation projected. The tumor was removed, together with the entire sciatic nerve, from the point where it emerges from under the pyriformis muscle, to the middle of the calf of the leg. The fibular nerve was given off within the pelvis, and through its whole extent, was enlarged to nearly twice the thickness of the entire sciatic in its healthy state.

About an inch above the upper border of the tumor, the fibres of the nerve began to diverge, and in their course spread out over either side of the tumor, forming a firm capsule, which gave shape to a mass of medullary and tuberculoid growth. The fibres of the nerve were seen to converge again, as they approached the lower border of the tumor, and unite in two principal points, forming the two divisions of the fibular nerve, viz. the anterior tibial and the peroneal nerves.

The popliteal nerve, which usually embraces about two-thirds of the sciatic, was in this instance somewhat smaller than the fibular branch, although much larger than the whole sciatic as it is generally found in its natural state. The greater part of this nerve passed down upon the inner side of the tumor, forming a deep groove, along which it parted with a portion of its fibres, which appeared to enter into, and assist in completing the capsule formed by the expansion of the fibular branch. Just at the point where the popliteal nerve leaves the lower border of the tumor, several small muscular branches are sent off to the heads of the gastrocnemii and soleus, on which may be seen several ganglionic enlargements which appear very much like the ganglia of the sympathetic.

The tumor measures 5 1-2 inches in length, and eleven in circumference. On laying it open, the outer portion was found to be composed of rather firm medullary substance, while the central parts were some-

what softened and of a yellowish hue, resembling partially softened tubercle. Indeed it is what has generally been described as a combination of medullary and tuberculous formation.

The accompanying drawing is a faithful delineation, as it now appears, in a state of preservation.*

Dr. Warren justly remarks that "the nervous texture seems less disposed than any other to organic diseases." The following extract from the concluding paragraph of his chapter on "Tumors of the Nerves," coming as it does from a man of Dr. W.s' experience, is of itself sufficient evidence of its correctness. "The nerves, at the extremities of amputated stumps, being exposed to pressure against the bone, sometimes enlarge, become painful, and require excision, so, also, pressure on a nerve, from a substance accidentally lodged in or near it, produces an enlargement. In the excision of portions of nerves of the extremities, which had been long the seat of painful affections, we have thought the nerve larger than natural. On the whole, however, we must say, that we do not happen to have met with any such enlargements as would constitute a *tumor* of the nerves, in the sense we attach to this term."

Perhaps such a statement, from such a source, is calculated to convey to the inexperienced observer, an impression that degenerations of the nervous texture are less frequent than they really are.

Dr. Bailey says: "I have seen an instance of a considerable tumor being formed in a nerve. It was very solid in its texture, of a yellowish white color, and larger in its size than a goose's egg. The nerve seemed to be in some measure lost in the tumor, and in one part of it a fibrous structure could be observed pretty distinctly, similar to that of a nerve. This swelling occurred in one of the axillary nerves, and was extirpated by Sir Everard Home, at St. George's Hospital."

The publication of this case attracted a good deal of attention at that time.

M. Velpeau, in one of his clinical lectures, says: "I saw a case of ganglion which occupied the sciatic nerve. It was seated on the back of the thigh, about four inches below the buttock; it had existed for several years, and acquired the size of a child's head. The tumor was extirpated in the following manner: The patient was placed on the belly, with the legs separated, and, supported by assistants, I made an incision six inches long, from the ischium, dividing the subcutaneous fascia and fascia lata; the tumor was thus exposed, drawn backwards, and dissected with caution from the edge of the biceps. It was now evident that the tumor was confounded with the sciatic nerve. The fear of gangrene or paralysis made me hesitate for a moment, and reflect whether it might not be possible to separate the tumor from the filaments of the nerve. I detached the circumference, and dissected the upper and lower parts of the nerve, as if I were making an anatomical preparation, and found that about one-third of its thickness was free, while the remainder was spread all over the bottom of the tumor. The patient bore this painful dissection with the greatest fortitude, and this gave me additional courage to proceed. I therefore dissected away each filament, and pushed them aside, and at last succeeded in completely isolating the tumor. . . . She was completely cured in three months."

M. Chelius and M. Roux have published similar cases, but in that

*See Frontispiece.

mentioned by the latter surgeon, the tumor was cancerous, and finally destroyed the patient.

Mr. Keate, of St. George's Hospital, in 1832, amputated the thigh of a woman 38 years of age, for a malignant tumor of the calf of the leg. On examining the limb after amputation, "the posterior tibial nerve was enlarged, and spread out over the posterior part of the tumor above, and seemed involved in the tumor at its middle. The tumor was enveloped in a cyst one-fourth of an inch in thickness." This was a medullary tumor, and it appears to have involved to a considerable extent the posterior tibial nerve. This, together with the case of M. Roux, are the only instances which I recollect to have seen published, of malignant formations in the texture of the nerves.

The case which I have here detailed, is evidently one in which the disease originated in the nerve itself; for we may remark that for more than two years the symptoms were entirely referable to functional disturbance of the fibular nerve, viz., pain, numbness, loss of muscular power, and a general wasting of all the parts dependent for nervous supply upon that nerve. There was neither pain, soreness, nor perceptible swelling, in or near the popliteal space, for more than two years after its commencement.

That it is of a malignant character, no one can entertain a doubt, who has an opportunity of inspecting the tumor itself. There may be a question as to the malignant character of the disease at its commencement.

A section of the small ganglia, situated along the branches of the popliteal nerve, exhibits a firm, fibrous structure, not unlike the nerve itself. Is it not quite probable that a similar fibrous ganglion may have occupied the site of the tumor in the fibular nerve, so far involving its fibres as to have interrupted the natural functions of the nerve, during the first two or three years of the complaint, or so long as it remained stationary, and that it may have assumed the malignant character at the time when it commenced its rapid growth?

I believe that until quite recently, most writers upon the subject have supposed that genuine tubercle and encephaloid formations were frequently met with in the same morbid growth, but at present doubts seem to be entertained by many, as to the existence of the two formations in the same individual. I am aware that Laennec and Dr. Graves have shown that a yellowish tint is sometimes produced, even in scirrhus, as well as other cancerous growths, by impregnation with the coloring matter of the bile. Dr. Hodgkin thinks that the yellow tint thus communicated is mostly confined to the older parts of these formations. Dr. Walsh believes there is much justness in the observation, and suggests that as encephaloid thus discolored bears some resemblance to tubercle, the similarity has caused the former to be mistaken for the latter.

Now, whatever may eventually be found as constituting the essential difference between tubercle and the various cancerous growths, it is quite sure that something very like tubercle is frequently found in combination with the encephaloid formation. I have repeatedly seen the two combined in the formation of the same tumor, and once, at least, I have seen in the same individual the carcinoma simplex vel fibrosum (of Müller) in the breast; encephaloid and something *like* tubercle in one ovarium, and colloid in the other.

I have now in a good state of preservation, among my preparations in the Museum of the Geneva Medical College, marked No. 21, an ovarian tumor, 6 inches in diameter, through which masses of tubercle and encephaloid are promiscuously distributed. The entire tumor appears to be made up of these two formations, together with its serous envelope, and the normal structure common to all these growths.

No. 23, of the same collection, is an undoubted specimen of the fibrous tumor of the uterus, taken from the same subject at a post mortem examination. The uterine tumor was of seven years' growth, while that of the ovarium was of more recent formation. The body of the uterus in this case would compare, as to size and shape, with that of a healthy woman in the fifth month of pregnancy. A section of the fundus exhibits a curvilinear arrangement of a very firm, fibrous structure. The cavity of the uterus contained a calcareous deposit, about two inches in length, and nearly one in thickness.

The inner lining membrane presented a ragged, corroded surface, besmeared with a dark, greyish, offensive matter, which had characterized the vaginal discharges for many months previous to death. On the exterior may be seen several globular projections, varying in size from that of a small hazel-nut to that of a man's fist, sections of which present a beautiful concentric arrangement of opaque, whitish, and very firm fibrous, or fibro-cartilaginous structure.

We have in this specimen a combination of characteristics which belong to no other morbid growth than that which is now generally known as the fibrous tumor of the uterus, an affection which Baillie described under the appellation of tubercles of the uterus. Mackintosh, and several other writers since the time of Baillie, have adopted the same language, having no reference, however, to any resemblance which these tumors may be supposed to bear to the characters which we understand as belonging to scrofulous tubercle. Indeed, Dr. Mackintosh tells us that "the diseased formation which generally bears this name is not the scrofulous tubercle which is so often found in the lungs, mesentery, and almost all other tissues of the body." The nature of the uterine secretions, and the corroded state of the mucous membrane, together with the general appearance of the cervix uteri in this case, might lead us to doubt whether the fibrous tumor of the uterus was so far removed from a malignant tendency, as some writers have supposed.

Such a combination of characters as these cases present, would seem to justify us in attaching but little practical importance to many of the arbitrary distinctions which prevail in our present systems of nomenclature and classification of morbid growths. Until some means are discovered by which we are enabled to distinguish between genuine scrofulous tubercle, and the tuberculoid formations met with in combination with cancerous growths, such cases as we have been considering should lead us to receive with some degree of caution, the recent doctrine which teaches that there is not only no alliance, but an actual repulsion between the two formations.

Case II.—In March, 1845, I visited Mrs. Kellogg, aged 26 years, in consultation with Drs. Paul and Munson, of this village.

She was rather above the medium stature, of a sickly, sallow complexion.—She had a tumor occupying the right leg, extending from the knee to near the ankle joint, the most prominent point being on the

outer side, near the head of the fibula. It had assumed somewhat the form of the leg, measuring 21 inches at the largest point of its circumference. Some parts of the tumor were quite firm and unyielding, others quite elastic to the touch, while a portion extending into the popliteal space was soft and distinctly lobulated.

She complained of soreness in each groin, but there was no perceptible enlargement of the inguinal glands. The uterine functions had been quite regular until within the last six or eight weeks. There was less soreness of the tumor now, than when it was smaller. The skin was slightly discolored, the superficial veins were somewhat enlarged, and over a small space, near the bifurcation of the popliteal artery, a low, blowing sound could be heard. Her general appearance indicated much constitutional disturbance.

The following is a brief history of its origin, as given at the time.

She first complained of pain in the calf of the leg, in the month of September, 1844, which was then supposed to be of a rheumatic character. Soon after, a small tumor was discovered on the outer part of the leg, just below the head of the fibula. It was hard, immovable, and somewhat tender to the touch. There was a dull, aching pain, without throbbing, but at times she felt what she described as "a buzzing or whizzing through the upper part of the calf, or a sort of tremor or sound." Her attempts to describe the sensation made a strong impression on the mind of one of the gentlemen in consultation, that the tumor might be an aneurism—indeed he fancied he could feel something like a tremor or pulsation on grasping the upper part of the calf with the hands. The tumor gradually extended itself in every direction, until it had assumed its present form and appearance.

As we could offer no encouragement of relief from any course of medical treatment, she was induced to submit to the curative process of Homœopathic remedies. It was being cured in this way until June, at which time it had enlarged to 24 inches in circumference. Soon after this, it was punctured by another physician, under the belief that it was a chronic abscess. A watery, sanious discharge continued from the opening, which became exceedingly offensive, the inguinal glands became painful and indurated, the abdomen tumid and painful, and, under a variety of quack doctors and quack remedies, she rapidly declined, and died on the 15th of July, 1845, ten months from the time of the first indication of the disease.

On examination, 18 hours after death, the tumor measured but 22½ inches in circumference, having diminished 1½ inches in consequence of the constant discharge during the last few weeks. An incision was carried from the knee to the ankle joint, the integuments dissected off, exposing the deep fascia, which was tense and shining, having more of the tendinous appearance than is natural. The superficial veins were thickened, and firmly plugged with coagula of blood and partially organized lymph. The deep fascia was hypertrophied to several times its natural thickness, an incision through which exposed a mass of degenerated tissues and foreign growth involving the entire leg, from the knee to the ankle joint. The popliteal space was occupied by medullary growth, about the color and consistence of recent healthy brain. The upper part of the calf presented a mass of bloody, fungoid substance, while the lower part of the leg seemed to be made up principally of a soft, medullary substance, portions of which resembled softened brain. Portions

of muscle degenerated into a coarse, fibrous structure, with occasional spicula of bone and hard fibro-cartilaginous structure, could be traced in various directions. Strong, fibrous bands, apparently the remains of processes of the deep fascia, were seen running in various directions through the general mass. During the examination, nearly a quart of bloody sanies drained off from the limb, most of which had been diffused through the cellular structure, exterior to the deep-seated fascia.

No further examination was allowed.—When we consider the nature and extent of disorganization effected in this case, it is a matter of great surprise that it should have been accomplished in the short space of ten months from its first appearance.

The blowing sound heard by applying the stethoscope to the upper part of the tumor was the same as that which is occasioned by a slight compression of any considerable artery, and as it was heard only over a small space about the bifurcation of the popliteal artery, it was supposed to have been occasioned by a slight compression of the anterior tibial artery at the point where it passes through the interosseous ligament. A very slight compression will offer sufficient resistance to the regular current of blood through an artery, to throw it into a state of agitation, and the tremor thus occasioned, being readily transmitted through the medullary mass, will sufficiently explain the cause of the tremor or vibratory sensation experienced through the upper part of the leg. Similar phenomena, sometimes amounting to distinct pulsation, have frequently been noticed in connection with encephaloid growths.

Mr. Lawrence, in a paper read before the Medico-Chirurgical Society of London, in 1832, relates a case in which there was distinct pulsation felt through the tumor for a time ; afterwards, there was a cessation of the pulse in both the tibial arteries. This again returned, together with the pulsation in the tumor.

The medullary formation, in this case, commenced in the head of the tibia, and " protruded from the bone, just at the point of division of the popliteal artery, and the passage of the anterior tibial through the interosseous ligament," which Mr. L. thought would account for the pulsation at an early period, the suppression of the tibial pulse when the growth was confined by the fascia of the leg, and its subsequent return when the fascia had given way.

Dr. Johnson speaks of having noticed this pulsation in two instances ; in one of which the tumor was in the thigh and groin, and the other, in the iliac fossa. In the former instance, the femoral artery was tied, under the supposition that the tumor was an aneurism.

A similar mistake has been attributed to Mr. Guthrie.

Mr. Walsh remarks that " the vascular character of encephaloid seems to render it an *à priori* probability that, under favorable circumstances, pulsation might be detected in it."

Dupuytren mentions the occurrence of pulsation, accompanied sometimes, in advanced stages, with general expansion of the tumor,—ceasing when the chief artery leading to the part is compressed, and returning again with simultaneous dilatation of all the minute arteries of the tumor.

Case III.—Miss Sarah Sackett, aged 30 years, of slender form, pale and sallow complexion, discovered, early in the year 1839, a small swelling upon the outer aspect of the right fore-arm, about three inches below the elbow. It gradually increased in size, attended with slight

uneasiness, especially a numbness and prickly sensation extending to the hand.

In the course of a year it had attained the size of a small orange, forming a prominence equal to half its thickness. It presented a smooth elastic surface to the touch, the skin retaining its natural color and appearance. It was removed by Dr. David S. Rogers, at the close of the term of lectures, at the Geneva Med. College, in January, 1840. The operation was quite tedious, occupying more than an hour. The tumor was found to project from between the bones of the fore-arm, and firmly attached to the interosseous ligament, and to the periosteum of the radius. The following letter, received from Dr. Rogers in 1841, will furnish us with the views which he entertained as to the nature of the tumor at the time of its removal:—

RYE (WESTCHESTER CO.), *Feb.* 25, 1841.

DEAR SIR: Your letter of the 11th instant came to hand yesterday. You request my opinion in the case of Miss Sackett. At the time I removed the tumor from her arm, I expressed a decided opinion as to its malignant character, and likewise the probability of its returning. Mr. Abernethy has named this species of tumor the Medullary Sarcoma. From the character of the disease I advised at the time, in case the tumor should return, to amputate the arm above the elbow; and I cannot give you a strong assurance of a perfect exemption from its return, should she submit to the operation. I have but little confidence in medical treatment for its cure. Sir Astley Cooper has proposed a course of treatment to prevent its return after an operation (see Sir A. Cooper's lectures on diseases of the testicle). Should you remove the arm, it would be advisable to treat her according to Mr. Cooper's plan, although in my experience it has not prevented a return of the disease.

With much respect, yours, &c.,

EDSON CARR, M. D. D. L. ROGERS.

In January, 1841, just one year from the time of the removal of this tumor, I was requested to examine another of nearly the same size, which had made its appearance in the cicatrix occasioned by the removal of the first. It was more prominent and pointed than the former one: it was likewise softer to the touch, and had a distinctly lobulated feel. It gradually increased in size, attended with but little pain or constitutional disturbance, until the 5th of June, when I amputated the arm above the elbow.

Although the character of the tumor at this time appeared quite evident, yet for the purpose of removing all doubts upon the subject, I made a free incision through the centre of the tumor, immediately before removing the arm. After its removal I injected the brachial artery, and dissected out the tumor, which was found nearly surrounding the radius, about four inches in length from its head downwards. It measured about 10 inches in circumference, and was composed entirely of soft medullary matter, through which were scattered a few small coagula of dark blood. It is still in a good state of preservation, and may be seen marked No. 16, in my collection of Morbid Anatomy, in the Museum of Geneva Medical College. It is, perhaps, as perfect a specimen of unmixed encephaloid growth as was ever met with.

The stump healed kindly by first intention, and her health continued unusually good for more than four years, during which no trace of any return of the disease could be discovered.

On the 17th of August, 1845, she was suddenly attacked with severe

pain in the left side, attended with difficult respiration, which seemed like acute pleuritis; but there was no febrile movement, and the pulse, though frequent, was small and weak. Anodynes, followed by a blister, seemed to afford relief; but her general health, and elasticity of spirits for which she was remarkable, began to decline. She had some cough and occasional pain in her side, until in the early part of November, while on a visit to her friends in Rochester, she had an attack of hemorrhage which evidently proceeded from the left lung. She was so far reduced by this, as barely to be able to remove home at the end of two weeks.

I first saw her after her return on the 21st of November. She was then confined to her bed in a semi-recumbent posture, inclining to the left side. She had cough, pain through the left side extending to the shoulder, difficult respiration, with a sense of fulness and tightness across the chest, which at times was extremely oppressive. She also had occasional sickness at the stomach.

On examining the chest, the left side was found much larger than the right: the intercostal spaces were prominent and elastic. There was little or no motion of the left chest in respiration. Complete dulness on percussion, and entire absence of respiratory sounds. The heart beat strongly about one inch to the right of the sternum. Respiration was strongly puerile over the right lung.

Aside from the early history of this case, such phenomena would be considered as strongly indicative of pleuritic effusion. The symptoms gradually grew worse, until the dyspnœa became so urgent, that I was strongly tempted to make an opening, with the hope of being able to evacuate the contents of the left chest; but I could not divest myself of the impression, that there was a peculiar elasticity of feel over the intercostal spaces, which did not belong to pleuritic effusion. Having a natural disrelish for anything like "dry tapping," my fears saved me the mortification which would have followed the attempt.

Her left foot and leg soon became œdematous, the dyspnœa extreme, and she died on the 7th of January, 1846.

An examination was held twenty-four hours after death. On removing the anterior walls of the chest, a mass of whitish, soft, pultaceous matter was brought into view, which I can compare with nothing better than partially decomposed brain. I commenced removing this with the hand, and meeting with no solid matter, I scooped out the entire contents of the left cavity of the chest, amounting to several quarts, about one-third of which consisted of large masses of dark coagula of blood. Some small portions were found, nearly of the consistence of recent healthy brain; but most of the matter was soft, exhibiting no traces of organization. Not a vestige of bronchial tube, blood-vessel, or pulmonary parenchyma, could be found. The cavity was lined with a ragged, adventitious, membranous growth, of which it is useless to attempt farther description. The entire mediastinum was crowded to the right of the sternum. The heart was rather smaller than common, otherwise quite normal in appearance. The right lung was compressed into about one-half of its original space, but apparently free from disease. The liver was slightly enlarged, and very firm in its texture, but no cancerous degeneration could be discovered.

By comparing dates in this case, we perceive that seven years elapsed between the first appearance and the final close of the disease—a period much longer than is generally required for encephaloid to run its course.

Another important circumstance was the entire exemption of the patient from all traces of the disease for more than four years after the removal of the limb in which it first appeared. Contrasted with the ordinarily uninterrupted and speedy course of encephaloid formations, this would seem to justify an early operation in all cases equally favorable for it: while, at the same time, it only affords another and a striking illustration of the fact, that an effectual removal of encephaloid from the system is a consummation hardly to be looked for under the most promising circumstances.

Painful as this conclusion may be, it is forced from us, and should by no means be lost sight of; for it is of the first importance to ourselves and the community, that when driven as a last resort to the performance of painful operations, we should proceed upon no false estimate of their value. The knife is a bitter medicine; hard to give, and hard to take; and should only be administered in view of what it fairly promises.

A great evil has been done to the profession, by the premature report in the journals of cases like the above, under the too sanguine denomination of *cures*. I have repeatedly been urged to report this case as one of successful treatment, but I had little confidence in it. I had *hope*, indeed, but it was hope inclining more to despair than assurance; and the result has verified my worst forebodings. Let us have *real facts:* we need them; and the profession is under obligation to any man who produces them. But your "*false facts*" trouble us:—they "lead to bewilder and dazzle the blind." In the name of science and of humanity, we say, spare us.

I have omitted any reference to the treatment of the cases I have described, chiefly because it was not unlike what is generally pursued. I am ignorant of any means by which more may be done in encephaloid disease than to mitigate somewhat the symptoms which incidentally occur, and perhaps delay for a little while the sad but certain catastrophe.

ART. II.—*Corpus Luteum. Its value as evidence of conception; and its relations to Legal Medicine, with the characteristics of the True and False. Being an attempt to reconcile the conflicting opinions of writers by the recent discoveries in the Physiology of the Ovaries.* By SAMUEL S. PURPLE, M. D.

WRITERS on legal medicine make but little mention of the difficulties that lie in the way of the formation of a correct opinion on the evidence afforded by a *corpus luteum*. Most anatomists who have attempted the description of the ovaries and their functions, have made mention of *true* and *false corpora lutea*, but give not the distinguishing mark between the two; writers on jurisprudence have taken but a casual notice of this—hence have arisen the difficulties of which we have just spoken.

The recent discoveries in the physiology of the ovaries not only tend, but actually do, when fully understood, clear up the mist that has been thrown around this subject; and the discordant opinions of anatomists, and writers on this branch of medico-legal science, may now be reconciled without the least difficulty. By many anatomists it has been supposed that every yellow body found in the ovaries was a *cor-*

pus luteum, the result of conception. This great mistake has arisen from the want of a true and correct knowledge of the functions of the ovaries, for it was not till within a few years past that their true functions were ascertained.

In the 6th volume of this Journal we gave a paper on menstruation, in which we proved (or attempted to prove) the true nature of this function, and its connection with, or dependence upon, the ovaries. In the present paper we shall attempt to show how far the principles set forth in that paper tend to remove the difficulties which lie in the way of forming a correct opinion of the value of the *corpus luteum* as an evidence of conception.

Haller* believes, 1st, that "conception never happened without the formation of a corpus luteum;" and 2d, "that the corpus luteum is never found in virgin animals, but is the effect of impregnation." Of the truth of these two propositions there can be no doubt at the present time. Previous to the late discoveries of the true functions of the ovaries, many talented and conscientious writers doubted the truth of Haller's views, for in examining the ovaries of virgins they frequently found yellow bodies—bodies which from the circumstances of the cases could not have been the effect of impregnation—hence have arisen the many conflicting opinions of the value of the *corpus luteum* as an evidence of conception.

Haighton,† from numerous experiments which "bear every mark of accuracy and fidelity," came to the conclusion that wherever *corpora lutea* are found "they furnish incontestable proof" of previous impregnation. Cruikshank,‡ W. Hunter,§ Baillie,‖ Meckel,¶ Montgomery,** and many recent authors, have come to the same conclusion. Blumenbach,†† Osiander,‡‡ Sir E. Home,§§ Blundell,‖‖ and some few recent writers believe that "*corpora lutea* are not the necessary result of impregnation." Bostock,¶¶ in order to reconcile these conflicting opinions, supposed that "the evolution of the vesicle (the vesicle of DeGraaf), and the production of the corpus luteum are, in all cases, essentially dependent upon the actions of the female, and that the office of the male does not commence until after this previous step of the progress." Had Mr. Bostock been fully acquainted with what now is generally believed to be the true function of the ovaries, he would not, we think, for a moment have entertained, much more put forth, such a supposition. Indeed, there would have been no necessity for it—facts, truths, are the great lever of the inductive system. With the chain incomplete, or broken, we wander in the mist of hypothesis, but when once complete, we are led with undeviating certainty to correct conclusions.

We have said that every yellow body found in the ovaries was not a

---

* Haller, Elem. Phys., vol. 8.
† Bostock's Element. Syst. Phys., 3d ed. note to p. 657.
‡ Phil. Trans., 1797.
§ Hunter's Anat. Grav. Uter., 1775.
‖ Baillie's edit. of the same, 1794.
¶ Meckel's Gen. Descr. and Path. Anat., Amer. ed., vol. 3
** Montgomery on Pregnancy, Lon. 1837.
†† Blumenbach, Spec. Phys. Compar., 1788.
‡‡ Meckel's Anat., ed. cit., vol. 3.
§§ Sir E. Home's Lectures, Comp. Anat.
‖‖ Blundell, Phys. Res., 1824, Lond.
¶¶ Bostock's Elem. Syst. Phys., p. 658, edit. 3, 1836.

corpus luteum, and we are compelled to believe this from numerous and repeated *post-mortems* made many times with special reference to the elucidation of this subject. Every one who has made the ovaries of the human female a particular object of study, must have been forcibly struck with the different appearance of yellow *spots* or *bodies* found in them.

In order that we may be as clearly understood as possible, we shall divide, according to the practice of most writers (although the division is not in truth as correct as might be), all yellow bodies found in these organs into true and false *corpora lutea*. By *true* we shall mean, a peculiar yellow body found always after conception. By *false* we shall mean those yellow bodies, or spots, found in these organs under various circumstances, apparently connected or not with conception. It might have proved interesting and perhaps profitable, had our limits permitted, to have given an account of the literary history of this subject, with extracts from some of the older writers, but we forbear, and with pleasure refer our readers to a series of valuable papers by R. Paterson, M.D., of Leith,* which may be looked upon as the most valuable in the profession. As much diversity of opinion exists as to the appearance of the true *corpus luteum*, we shall, before proceeding farther, give the general characteristics of this body in the human female. A more vivid and correct description cannot, in our opinion, be given, than the one found in Dr. Montgomery's work,† which, although rather lengthy, we have thought best to copy. He says, "If we examine the ovaries of a pregnant woman, especially if her conception has been recent, we observe, that the one which has supplied the germ differs, in several remarkable particulars, from its fellow of the opposite side; it strikes the eye at once as being larger, rounder, and more vascular; to the touch it feels fuller and softer: we perceive further, that this increase of size of the one is not so much the result of an increased development of the whole substance, or body of the organ, as of the addition to it, at one part of a tumor, projecting more or less from its natural outline, as we find in the eye, where the circumference of the cornea projects from the outline of the globe, the segment of a smaller circle being superimposed on that of a greater. When we examine the protuberant part, of the impregnated ovary, we find that the increased vascularity is principally confined to its limits, where we perceive, creeping on or near the surface, a few small, thread-like, and convoluted vessels, and we generally find the color of this part quite different from that of the rest of the organ; appearing as a deep, or dull, brownish yellow, seen through a slightly reddish medium; and somewhere on the surface of the prominence, we observe a distinct cicatrix or appearance as of a rent imperfectly united;‡ to a small extent around which the peritoneal coat appears as if abraded, or removed by slight superficial ulceration; and here it is that the twining vessels just mentioned are most distinctly observable.

"This is the point through which the ovulum escapes from the ovary, but it is almost invariably closed up, and impervious, except it happens to be examined within a few days after the passage of the germ. The

---

* Edinburgh Medical and Surgical Journal, vols. 53, 4, 5, and 6.

† Montgomery on Pregnancy, Amer. ed., p. 149, et seq.

‡ "Cavam cicatricem referens, qualis ab ulcusculo male curato remanere solent." —Noortwe.

external changes by which we recognize the existence of the corpus luteum in the human ovary, are most obvious in the earlier periods of pregnancy, while there is, as yet, the central cavity, and a degree of vascularity and vital action present; these afterwards subside, the cavity begins to close in, and the corpus luteum losing somewhat of its size, the increased bulk of the ovary is proportionably reduced also. Having satisfied ourselves of the presence of the external characters, we proceed to examine the internal structure; in order to do which we should make a section of the ovary, carrying the knife through the centre of the prominent part, so as to divide the ovary into two longitudinal sections, by which we expose the corpus luteum. In *form* and *size*, it is almost always more or less oval fabiform, with its longer axis varying from four to five-eighths of an inch, and the shorter from three to four-eighths; its thickness is generally less than its breadth. Thus it occupies from a fourth to one half of the whole area of the ovary, according to the period of gestation at which it is examined, the size being generally in the inverse proportion of the time elapsed since conception.*

"Its structure is obviously and strikingly glandular, having a lobulated appearance, with slight convolutions, resembling not a little the section of a human kidney;† or, as some one has said, it is like a miniature of the particular section of the brain called by anatomists *centrum ovale. It is very vascular*, small vessels being frequently visible without any preparation; but if fine colored injections have been previously thrown into one of the branches of the spermatic arteries going to the ovary, the vessels of the corpus luteum will be filled with the coloring matter, and are to be seen running from its circumference towards its centre. The injection will also pass readily and freely into the little serpentine vessels on the surface of the ovary, over the corpus luteum, and around the rent in the external covering; and not unfrequently some of the injection is found extravasated into the central cavity, especially at early periods of conception.

"*Its color* is, as its name implies, a dull yellow, very similar to that of the buffy coat of the blood, exhibiting generally,‡ when recently exposed, a slightly reddish tinge, '*ex flava rubens.*'‖ Its centre exhibits either a cavity, or a radiated or branching white line, according to the period at which the examination is made; if within the first three or four months after conception, we shall, I believe, always find the cavity still existing, and of such a size as to be capable of containing a grain of wheat at least, and very often of much greater dimensions; this cavity is surrounded by a strong, white cyst (the inner coat of the Graafian vesicle), and as gestation proceeds, the opposite parts of this approximate, and at length close together, by which the cavity is completely obliterated, and in its place there remains an irregular white line, whose form is best expressed by calling it radiated, or stelliform.

---

* This last remark, we are sorry to say, is not in accordance with the result of our own investigation, for we were loth to believe, until obliged to, that this accurate description in all other respects, was incorrect in this particular. Farther on in this paper we shall give the result of our own researches on the development of this body.—S. S. P.

† *De Graaf*, p. 177.

‡ The reddish tinge is peculiar to the first three or four months of pregnancy, after which time it rapidly disappears.—S. S. P.

‖ Haller, "Ex luteo rubens." Baer, "E rubella flava."—*Rœderer.*

"Of this latter appearance it ought to be observed here, that it is visible as long as any distinct trace of the corpus luteum remains, and forms one of the most essential characters, distinguishing this body from every other that might be confounded with it."

We owe an apology to our readers for making so lengthy a quotation, but a clearer description, it seems to us, cannot be given in justice to the subject. True, we might have said that its size was that of a cherry; its structure in appearance glandular; its color, as its name implies, yellow, in the early stages vascular to a greater degree than later; possessing in its early stages a cavity, at a later period a cicatrix. Such a description might have answered for those acquainted with the subject, but to a majority of the profession it would have been hardly intelligible, much less sufficient for a correct guide in a *post mortem examination.*

In speaking of the development of the *corpus luteum*, Dr. Montgomery gives it as a general rule, that the size of the body is "generally in the inverse proportion of the time since conception." In ten cases which we have examined in reference to this, four of which were at or near the fourth month of pregnancy, three at or near the seventh, two at the second, and one at the full period of gestation, the greatest size was found to be at the fourth month. Whether this is in accordance with the result of the investigation of other writers, I am unable to say. Dr. Montgomery supposes the size to be governed by the size of the Graafian vesicle. We can easily see, *à priori*, that this might be the case. After delivery it rapidly disappears, and generally by the end of the fifth month all distinct traces are lost. We have not been able to discover any traces of it later than the fourth month, although we have often examined the ovaries of females to ascertain this point. Dr. Paterson thinks he has discovered distinct remains of it as late as the seventh month after delivery, at the full period of gestation; Dr. Montgomery as late as the fifth.

Besides the yellow body which has just been described, there are others, a description of which it becomes necessary to give in this place. All who have examined the ovaries of the human female, must have noticed small yellow spots, or bodies varying in size and the degree of color, in the substance of these organs. These are the bodies which have given rise to the great diversity of opinion that exists in the profession, on the value that ought to be attached to the corpus luteum, as an evidence of conception. These bodies owe their origin to various causes. Thus, at each menstrual period, when the rupture of a Graafian vesicle takes place, the cavity left by the escape of the fluid and the ovum is immediately filled with blood; the red globules being soon absorbed, the fibrin is left as the result. This remains a greater or less length of time, varying according to circumstances. This is the body that Mr. Ritchie has denominated "*corpora menstrualia*," a name, by the by, to which we can see no reasonable objection—and this is the body which is most liable to be confounded with the true *corpus luteum* in its early stages only, as we shall see in the subsequent part of this paper. Again, inflammation of the serous, or inner membrane, lining the Graafian vesicle, by which lymph is cast out, causing an apparent (at least) hypertrophy of the vesicle; effusion of blood, in a greater or less degree, into the proper substance, the structure of the ovary, constituting the true apoplexy of the organ; cysts or cavities filled with a

fatty substance of a yellow color; have been described as false corpora lutea. On examining the ovaries we frequently have found a small, hard point, like a tubercle, sometimes of a yellow, at others of a grey color, having the consistence of cartilage. Whether this is in any way connected with a degeneration of a Graafian vesicle, we are not able to say. This has been pointed out to us as a virgin corpus luteum. These bodies, which we have just described, vary from one to three lines or more, in size. Those which arise from the rupture of a Graafian vesicle, are sometimes larger, and are irregular in shape, sometimes oval, at others round, and at others of a square or triangular shape; to the naked eye they possess no blood-vessels. When a very fine, minute injection is thrown into the spermatic arteries, and completely fills the minute vessels of the ovaries, it does not enter into these bodies; hence Dr. Montgomery makes this one of the marks of distinction between *true* and *false*. From the want of free vascular connection, they do not possess that peculiar appearance which characterizes the true, and which Hunter terms "tender and friable, like glandular flesh."

The bodies which we have just described, together with the cicatrices which are always seen on the surface of the ovaries of females who have menstruated, have very often been mistaken for true corpora lutea, and described as such by lecturers, and even by "writers on Forensic Medicine."* They possess none of the characteristics of the corpus luteum which is the result of conception, unless it may be the yellow color, and even this is not always the color of the true corpus luteum; for we have frequently seen it of a reddish brown. Again, in the false body the yellowish matter is contained within the inner membrane of the Graafian vesicles, whilst that of the true body is formed between the two membranes. On this point, however, there is still some dispute. Bäer,† Valentine,‡ and others, believe it to be the inner membrane of the Graafian vesicle in a thickened state. Dr. Lee, of London,‖ is of the opinion "that it is formed around the outer surface of both these coats (the outer and inner coats) of the Graafian vesicle, and that the stroma of the ovarium is in immediate contact with the external surface of the yellow matter." While De Graaf,§ Montgomery, Paterson, and most of modern writers believe, as we stated above, that it is formed between the two membranes. The great difficulty that exists in determining this point arises from the want of a sufficient number of examinations in the early periods of pregnancy. Unfortunately for the elucidation of this subject, these do not frequently occur, and when they do, unless it be at a later period than the third week, we are very liable to confound them with the condition that is known to exist during the flow of the catamenia. We have not had it in our power to examine any case earlier than at or near the second month of pregnancy. Dr. Paterson, in the Edinburgh Medical and Surgical Journal, Vol. I., for 1840, gives the history of a number of cases in which (he supposes) conception took place only a few weeks previous to death; but as the precise period of time is doubtful, in the cases mentioned, we are led to place but little dependence upon the

* Smith's Principles of Forensic Medicine, p. 489, edit. 1821.
† Edinburgh Med. and Surg. Jour., 1836.
‡ Medico-Chirur. Trans. Vol. XXII.
‖ Graaf, de Mulierum Organ. Generat. Insen., Batav., 1672.
§ Edin. Med. and Surg. Jour.

condition pointed out as peculiar to the first three or four weeks of pregnancy. The case of Drs. Reid and Thomson, given by Dr. P., may be looked upon as more definite. The woman had been married six weeks previous to death. "The last menstruation ceased on the 24th of May, 1838. Her husband, a laborer, visited her at the end of every week, and her death took place on the 1st of July, that is, five weeks and one day after the first visit of her husband, succeeding to her last menstruation. The uterus was nearly one half larger than in the unimpregnated condition. The left ovary presented the most perfect specimen of a *corpus luteum* in the process of formation, which I have ever seen in the human female." In the two cases which we examined, the first was that of a young woman æt. about 20 years, who committed suicide by drowning. For rather more than two months she had been intimate with a young man, and for two months previous to her death she had not been regular. The appearances I give as I find recorded in my notes taken at the time. The uterus near a third larger than natural, filled with a soft decidual membrane, and containing the ovum. Left ovary natural. Right presents an elevation or prominence of a purplish color; over the surface can be seen numerous red, tortuous, thread-like lines, which seem to converge towards the summit of the prominence, at which point a small depression can be seen, having the appearance of an imperfectly united, ragged rupture; in the centre of this is a small opening leading into the substance of the ovary. Upon cutting through the centre of this prominence, the body causing it was of a reddish brown color, four-eighths of an inch in length, and of an irregular oval shape, containing a cavity near an eighth of an inch in diameter, and lined with a smooth, dark red membrane. This possessed all the marks of a true corpus luteum. The second case was examined July 17, 1846, by Dr. W. C. Parker and myself for Dr. Rawson, coroner. The young woman, æt. 21 years, committed suicide by taking a large potion of arsenic. She stated to one of her most intimate relatives, about a month previous to death, that she had not been "unwell" for a month, and that she was in the "family way." She was receiving the addresses of a young man, and was known not to have menstruated for two months. I give the appearance of the uterine organs as taken at the time:—Uterus a little larger than natural. Right ovary presented a number of cicatrices upon its surface, the left about one-third larger than the right, soft and more vascular. The increased size appears to be owing to a prominence of a dark purple color, having creeping over its surface a few bright red vessels. On the summit of this prominence is a small depression which leads to an opening, which will not, however, admit a small probe. On making a section of this prominence, a yellow vascular body is found, six lines in length and five in breadth, possessing a cavity lined with a smooth dark red surface. This body presents the appearance which Hunter terms "tender and friable, like glandular flesh." This specimen was examined by Prof. J. B. Beck, of this city, who pronounced it at once to be a true corpus luteum, about two months from conception.

We have given these two cases, thinking that they might throw some light upon the investigation of the early stages of this body. The other cases which we have, possess nothing peculiar in their appearance, and we, therefore, have thought best not to give them in detail. By way of contrast, we will now give the appearance of a false corpus luteum, the result of menstruation. The patient was known to have menstruated

24 days previous to death. She was the mother of three children, the youngest æt. 6 years. She died suddenly from suffocation—was 32 years old. On examination, the uterus was healthy and of natural size, as was also the left ovary, the surface of which presented numerous scars or cicatrices caused by menstruation. The right ovary natural in size; the surface of this also was studded with a number of scars, and presented, when cut into, a brownish yellow body two-eighths of an inch in length, one eighth in breadth, and a little more than a line in thickness, having in the centre a red streak or line. This body was situated near the surface, and produced no enlargement or prominence; immediately over it was a cicatrix. There did not appear to be any increased vascularity about the surrounding structure of the ovary. In a case which we examined on the 12th of May, 1846, for Dr. Rawson, coroner, through whose politeness we have been favored with the opportunity of examining most of the cases from which the facts contained in this paper are made up, the woman had menstruated ten days previous to death. The peculiar yellow cast was not so well marked; the absorption of the red globules of the blood, and the deposit of the coloring matter, upon which it is said, by some, in part to depend, had not taken place. The cicatrix immediately over the body existed. There was no congestion in the surrounding structure. As we have said before, when an examination is made within the first week, the opening leading to the vesicle filled with the effused blood will generally be found; but there exists no yellow appearance—at least such is the result of our own investigation.

From the cases, with the appearances, which we have given of the true and false corpora lutea, we think there can be but little difficulty in distinguishing between the two, if we remember the prominent features which are characteristic of each even when taken separately, and the diagnosis will be much more easy if a comparison be instituted. For instance, by way of recapitulation, in the true corpus luteum, which is the result of conception, the following are the prominent points.

1. As to *external form*, being an increase in the size of the ovary when compared with its opposite, sometimes amounting to nearly one half, which seems like the addition of a portion to the substance of the ovary. The prominence of a dark color, varying from a deep red to a dark blue or purple. Upon the summit an excavation, or depression, leading to an opening into a cavity below (this last is the appearance in the early stages), and running over the surface a number of red tortuous lines.

2. As to *size* and *form*. When cut into, varying according to the age from conception, generally from five to eight lines in length, being in form irregular, round or oval, and possessing a cavity or a stellated line or cicatrix.

3. As to *color*, varying also according to the period examined, if previous to the third or fourth month, frequently of a reddish brown or of a light yellow—the centre lining the cavity of a dark red. If examined towards the close of gestation, the color approaches a light or greyish yellow, having generally a white, radiated or stelliform line of a pearl color in the place of the cavity. We have noticed in one case at the full period a large cavity filled with a dark fluid, the cavity surrounded by the yellow matter about an eighth of an inch in thickness.

4. As to *structure*—which appears to be glandular, resembling somewhat a section of the human kidney, or that portion of the brain called

by anatomists, *centrum ovale.* It is vascular, and capable of receiving a fine injection when thrown into the spermatic arteries.

These may be said to be the leading features or characteristics of a *true corpus luteum.*

Those of the false corpora lutea are:

1. The want of any elevation or enlargement of the ovary.

2. *The size*, which may vary, being from that of a pea down to the size of a millet seed, when it appears like a spot in the substance of the ovary.

3. *The color*, which is often of a dirty, at other times of a light yellow or grey color. It wants the glandular appearance and the central cavity lined by smooth membrane.

4. In the fact of its not being capable of receiving an injection. Dr. Montgomery has given, as one of the characteristics, the absence of the external cicatrix. "The external cicatrix," says he, "is almost always wanting." This is the case in those which arise from an enlarged Graafian vesicle, and by the subsequent absorption of the fluid, producing a puckered or shrivelled appearance; but is not the case in those which arise from a ruptured Graafian vesicle during menstruation, *which is by far the most common form of false corpora lutea.*

Having given the characteristics of the two, we come now to inquire how much value can be placed upon this body as an evidence of conception? Various have been the opinions given to this inquiry. Much discussion and numerous investigations have been called forth, and, as stated in the commencement of this paper, conflicting and unsatisfactory has been the answer. As we stated before, Blumenbach, Osiander, Sir E. Home, Blundell, and a number of other writers, believed that no dependence could be placed upon it; whilst Haller, Cruikshank, W. Hunter, Baillie, Meckel, Montgomery, Lee, Paterson, and others, believe that it is proof positive of conception. Dr. Montgomery's words are: "If I may be allowed to add the result of my own observations, which have now been continued through a period of nearly ten years, during which time I have never omitted a single opportunity within my reach for examining the bodies of women of all ages, and under all the various circumstances of virginity, after intercourse, during gestation, and subsequent to delivery, at different periods from conception; these opportunities having been afforded by more than one large hospital, as well as in private practice. I have also dissected hundreds of the inferior animals with reference to this point, and have in my museum preparations of ovaries exhibiting the corpus luteum in different conditions in the human female, and also in cows, mares, sheep, sows, goats, bitches, cats, hares, rabbits; and my firm conviction is of the truth of both Haller's propositions, viz:—*that conception never happens without the production of a corpus luteum, and that the corpus luteum is never found in virgin animals, but is the effect of impregnation.*"

Dr. Lee says: "From all the observations hitherto made upon the true corpus luteum, we may conclude that it is never formed but as a consequence of impregnation. The yellow oval-shaped substances found in the ovaries of women who have never been pregnant, are produced by morbid states of the Graafian vesicle, and are essentially different in structure."*

* Medico-Chir. Trans., vol. 22; also Lee on Mid., 1st Am. Edit.

Dr. Paterson is of the opinion "that a certain specific body (called the corpus luteum) is formed and left in the ovary after conception,"* different from all other bodies found in the ovary.

Dr. Gross† of Louisville, who, in company with Professor Parker (now of this city), has paid particular attention to this subject, is of the opinion that the researches together with the conclusions of Dr. Montgomery "upon this subject are perfectly conclusive."

From the numerous examinations which we have made of the ovaries of human females, at all ages and under all conditions of health and disease, during childhood, at puberty, before, during and after menstruation, at the various periods of gestation, and after delivery, we are firmly of the belief that the *true corpus luteum is an infallible sign of conception;* and that the great diversity of opinion which has been put forth relating to the value of this body as an evidence of conception, has arisen from the want of a proper knowledge of the physiology of the ovaries, consequently confounding and calling all yellow bodies or spots corpora lutea.

From what we have read of the writings of those who differ from this opinion, we can but believe that they have mistaken the true appearance of the corpus luteum, and hence have confounded, in their descriptions, the *false* with the *true*, either forgetting or not knowing that all yellow bodies are not true corpora lutea, and hence are in no way connected with the process of generation.

By way of illustration, we would say that cases not unfrequently arise, in which it becomes a matter of the greatest importance to distinguish between a *true* and *false* corpus luteum; and here it is that the practical bearings of our subject are seen. Take the case of the four‡ Edinburgh medical students. A prosecution was raised against four medical students, for disinterring the body of a lady in Glasgow. The body happened to be so disfigured that it could not be identified by the relations. The ovaries, however, were examined, and it was reported that a *true corpus luteum* was found in one of them, which decided that they had not belonged to the lady in question, who was a virgin, and advanced in life. On the trial, great contradiction took place between the opinions of the medical witnesses, one half of whom asserted that the *corpus luteum* in question was a true *corpus luteum*, while the other half maintained that it was not. The body of this individual was afterwards identified by a dentist, who produced a cast of the gums." In the absence of the proof afforded by the dentist's cast, it might have been of great assistance to the students, to have established the fact of the presence of a *true corpus luteum*, as this would, in evidence before the jury, be sufficient ground for the immediate discharge of the prisoners, the prosecution having shown or testified that she "*was a virgin and advanced in life.*"

The oft quoted case of Miss Burns§ is still more clear and to the point. Charles Angus, Esq., of Liverpool, was, in the fall of 1808, tried at Lancaster, for the murder of Miss Burns, a female in his family. (Owing to its length we shall not give the case entire, only such as relates to our subject.)

---

* Edinburgh Med. and Surg. Jour., vol. 2, 1841.
† Gross's Path. Anat., 2d ed. 1846.
‡ Edinburgh Med. and Surg. Jour., vol. 53, 1840, p. 60.
§ Beck's Med. Juris., 6th ed., vol. 1, p. 247.

It appears from a review of testimony in the case that for some time previous to the death of Miss Burns, the attendants had noticed that she had increased gradually in bulk, and had the appearance of being pregnant. A few days previous to her death, she appeared to suffer great pain; she could not bear to be touched, and she was observed occasionally to hold fast with her hands to the end of the sofa on which she sat. The pains continued during the whole of Wednesday and Thursday, but on Friday morning (the day she died) they had gone off, and she could walk and appeared much smaller. She died in the course of the day. Upon dissection, the uterus was found enlarged, and capable of holding a quart of fluid. The whole internal surface was bloody; near the fundus was a well defined circular space, of a darker color than the rest, about four inches in diameter; this space was rough, and a small fragment of the placenta remained adhered to it. There were blood-vessels in it as large as a crow quill; the walls of the uterus were about half an inch in thickness. The os uteri was much dilated. "The symptoms previous to her death, and the appearances observed on dissection, were such as to warrant a supposition that she was poisoned," and that she had been recently delivered of a child, near to the full period of gestation. "Mr. Angus was indicted on two counts: 1st, For poisoning Miss Burns; and 2d, For administering poison (oil of savine) in order to procure an abortion. Accordingly, on the trial, the medico-legal questions agitated, were: 1st, Whether Miss Burns had died from the effects of poison; and 2d, *Whether she had been delivered of a child recently before her death.* The opinions of the medical witnesses examined in the case were conflicting. Drs. Gerard, Rutter, and Bostock, and Mr. Hay, considered the appearances "conclusive of a recent delivery." Dr. Carson, for the defence, objected to such a conclusion, and considered the appearances to have been "produced by *hydatids.*" Owing to the difference of opinions expressed by the medical witnesses the prisoner was acquitted. Subsequently Mr. Hay took the uterus and its appendages to London, where they were examined, and the ovaries divided in the presence of a number of physicians, and a *corpus luteum* was distinctly seen in one of them. He then received certificates from Drs. Denman and Haighton, Messrs. Henry Cline, Charles M. Clarke, Astley Cooper, and Abernethy, all stating that it exhibited appearances that could alone be explained on the idea of an advanced state of pregnancy. And it appears to have been universally allowed, that the discovery of the *corpus luteum* proved the fact beyond a doubt.

Had the ovaries been examined at the *post mortem* examination, there is but little doubt that a different verdict would have been rendered, as the discovery of a *true corpus luteum* would have proved, beyond a doubt, that conception had taken place. The supposition that hydatids were expelled would not have possessed any weight in evidence against such a conclusion.

177 Hudson st., Sept. 21st.

ART. III.—*Case of Perforating Ulcer of the Gall-bladder, complicating Continued Fever: with Remarks.* By DANIEL AYRES, M. D., of Brooklyn, L. I.

IN adding another tribute to the domain of pathology, it becomes a painful duty to record a death from among the youthful votaries of medical science; one whose bright progress vied with the noble principles of his head and heart, in securing the warmest esteem of friends and the respect of his seniors in that profession, upon whose threshold he has fallen at the early age of 21 years. Mr. John James Lawrence was an indefatigable student of medicine. For some months previous to an attack of fever, he had been the subject of an obscure derangement of the digestive organs, which, though presenting little of novelty or interest previous to his death, may be valuable in connection with the pathological changes giving rise to a fatal termination.

Though of an active sanguine temperament, accustomed to exercise, rigidly temperate in his habits, he suffered frequent acute attacks of dyspepsia and piles, attended with a torpid and irregular state of the bowels. During ten months, these seldom acted without the assistance of medication; the discharges of fluid consistence, varying in color, attended with more or less pain and great irritability of the urinary organs. No tenderness was ever experienced in the region of the stomach or liver; pulse averaging 86 per minute; tongue slightly coated, and papillæ prominent. These symptoms, though temporarily mitigated by treatment directed to a functional derangement of the liver, returned without apparent cause, and became a source of serious annoyance. During six weeks' attendance at the Bloomingdale Hospital, in the capacity of assistant, he exposed himself constantly and assiduously to the fever-wards of the institution, and was seized July 11th with a chill, followed by vomiting and some fever. Took ℞ Mass. Hydrarg. gr. x. July 12th: Removed to his residence, complaining of intense pain in the head, back, and limbs, thirst, muscular soreness, and great debility. His eyes suffused, skin hot and dry, bowels constipated, pulse 110, tongue foul and slimy. To have

℞ Submur. Hydrarg. gr. viij.
P. Ipecac. c. gr. x. M.

with ice and barley water freely, and perfect rest. July 13th: Slept well after 10 o'clock P. M. Bowels evacuated several times; free diaphoresis, pulse 98, full and soft. July 14th: Urgent symptoms much relieved, still had some fever, is restless and thirsty. July 15th: Much as yesterday, pulse 96, no tenderness about abdomen on pressure, bowels confined. To have an enema.

July 16th. After a free alvine evacuation, passed the night comfortably, pulse 88, skin cool, desires food.

July 17th. Had been out of bed, and, contrary to directions, went down stairs, eat some broiled fish, and sat exposed to a cool draught of air.

July 18th. Does not feel so well, had some thirst and fever last evening, restless, pulse 100, skin hot, especially the abdomen, but free from pain or tension. To have enema, also

℞. Liq. Ammon. Acet. ℥ss.
Emetin. gr. 1-8 M. Ter q. hora, sumend.

July 19th. Rested poorly, much fever, pulse 120, tongue covered

with white coat, edges and tip red, mind and countenance anxious, much general soreness. To repeat enema and continue treatment.

July 20th. Much as yesterday, bowels have acted.

July 21st. Tongue little changed, pulse 110, considerable heat of surface and thirst. To have sponging and ice more frequently and continue.

July 22d. Has passed a better night, tongue cleaner, but still red; less thirst and irritability. Pulse 100. To have ℞. Ol. Ricini ℥j. and continue.

July 23d. Had a dark semi-fluid dejection highly offensive, some colicky pain, which yielded to an external anodyne application.

July 24th. Rested tolerably last night, tongue more natural and slightly furred. Had two very dark evacuations, abdomen soft, and as heretofore insensible to pressure accurately applied. Skin a little dry, pulse 95 and soft.

July 25th. Much as yesterday, bowels moved twice, lighter in color, no tenesmus.

July 26th. Usual dose of diaphoretic mixture caused nausea and vomiting. Skin moist at intervals, bowels moved three times, pulse 92, slept at times during the day. To diminish mixture.

July 27th. Feels better and stronger this morning, pulse 90, skin cool, tongue less red at tip and edges, moist, bowels quiet, free from tenderness. To have

℞ Infus. Serpent. Virgin. and continue.

July 28th. Very slight exacerbation last evening. Slept well, other symptoms much as yesterday.

July 29th. Feels decidedly better and desires food, pulse 88, regular and soft, bowels moved once a day, skin cool. To have chicken tea and continue.

July 30th. Exhibits more strength, lies constantly on his sides, nourishment agrees well.

July 31st. Scarcely any febrile symptoms last evening, slept well all night and awoke refreshed. Alvine evacuations look better, pulse a little too active but soft, tongue almost natural.

Aug. 1st. Doing well, to have mutton broth.

Aug. 3d. Sits up in bed, is progressing.

Aug. 4th. Spoke very strongly, looks well, appetite craves food—moderately allowed.

Aug. 5th. Entirely free from fever, pulse 86. Skin cool, tongue moist.

Aug. 6th. Is gaining daily, pulse 85, secretions improving.

Aug. 8th. Symptoms all good—is a little peevish, and wishes his attendant to remain with him constantly.

Aug. 9th. Much as yesterday. Complains of confinement to bed. No febrile symptoms.

Aug. 11th. Doing finely, pulse 85, continues nourishment.

Aug. 12th. Feels extremely well this morning after a good night's rest, took his food with relish as usual.

11. A. M. Patient called my attention to "a singular feeling about the abdomen" as he expresses it, not located nor painful, and passing away when his mind is occupied, pulse 86, skin naturally soft and moist, abdomen free from sensibility to pressure and tumefaction, bowels confined since 10th. To have strong enema, and a sinapism to epigastrium.

Aug. 13th. Has been restless all night. Suffered no pain, but very uneasy, respiration a little hurried, no fever, in other respects as yesterday, free semi-fluid evacuation of healthy color—appetite as usual.

3 P. M. Was summoned in great haste. Patient had been seized with an acute pain in right hypochondrium. Found him greatly excited, and tossing about the bed. Countenance anxious, breathing quick, forehead covered with cool perspiration, body and limbs warm, pulse 140, quick and small, abdomen a little sensitive, slight spasmodic action of the facial muscles at intervals; expresses himself conscious that something serious has occurred. To have

℞ Spts. Vin. Gal. ʒ ij.
Tinct. Opii gtt. v. every 20 minutes.

7 P. M. Slight icterode appearance of the adnata noticed, pulse 120, and small, spasm increased, general muscular tremor, abdomen tympanitic, covered with vibices, and tender to pressure, much belching attended with pain, especially after drinking, passed urine as usual, no vomiting. Continue mixture, also

℞ Mist. Camph. ʒ ij.
Carb. Ammon. gr. ij. M. at intervals.

Aug. 14th. Intellect perfectly lucid up to last evening, but wandering at intervals during the night; dozed for half an hour towards morning. Complained greatly of pain on motion, but could not remain easy in any position, had less spasm, in other respects no material change.

9 A. M. Talks very freely and incoherently, but collects himself and answers rationally. Surface where sinapism was applied very red, cuticle raised for 2 inches and filled with serum, countenance hippocratic, profusely sweating.

11 A. M. Little changed, pulse continues rapid and loses in volume.

3 P. M. Is rapidly sinking, respiration irregular.

11 P. M. Severe convulsions almost constantly, hands cool, ecchymosed spots appear about the abdomen, recognized his attendant, gradually sank and expired at 3 o'clock in the morning of next day.

Post Mortem seven hours after death.—Head not examined, as no cerebral symptoms were present before or during his disease. Lungs and heart healthy; no adhesions in thorax. Pericardium contained ʒ j of serous fluid.

On puncturing the abdomen from 8 to 10 ounces of bilious matter, serous in consistence, escaped, tinging a sheet beneath of a bright gamboge color. By extending the incision, patches of lymph were found covering the peritoneal surfaces of the liver and intestines. The appearances of the gall-bladder attracted immediate attention. Its size and situation nearly natural, containing some 3 oz. of healthy and numerous particles of concreted bile. About three lines from the fundus a sacculated tumor presented, embracing a surface of six lines in diameter, slightly discolored, and formed by the ulcerated condition of the mucous and fibro-cellular structure of the organ within, and consequent attenuation of its peritoneal covering: in this was found a minute perforation. Towards the inner edge of the organ, and at its junction with the liver, another point was visible, somewhat different from the former in color and appearance, and around its edges delicate bands of lymph were formed about two lines in length, connecting the cystic and hepatic peritoneum. These readily broke down, and admitted the passage of a probe into the cavity. Around this point of ulceration, as well as at the neck of

the organ and its neighboring lymphatic gland, the vessels were highly injected, of bright hue from recent inflammation, but no trace of this was discoverable about the first point of rupture. The internal surface of the gall-bladder exhibited two well marked points of ulceration corresponding to the external before described. That of the first three lines in width presented a well-defined, smooth, sharp edge, almost circular in form, overhanging the dark-colored excavation, at the bottom of which was the perforation: no trace of inflammation around the ulcer. The second four lines in width apparently more recent and active, was surrounded with ragged, irregular edges, enclosing a yellowish soft mass, composed of lymph, softened texture and bile. The remaining surface of the organ presented its usual reticulated structure, without a trace of acute or chronic disease. The cystic and common ducts were patent throughout their extent, with no perceptible alterations of tissue. The same may be said of their point of entrance into the duodenum. The stomach and intestines, so frequently the subject of morbid appearances in this form of fever, presented a remarkable freedom from disease. Slight gastro-enteritic symptoms occurred in the progress of the case, but subsided before its termination. The mucous membrane was normal in every respect; some marks of vascularity alone existing in the duodenum for the space of two inches. The small intestines contained healthy fœces. Peyer's plates exhibited a pale rosy hue, and were slightly hypertrophied; but throughout the whole alimentary canal, no marks of abrasion, ulceration, or softening were visible. The liver and kidneys healthy; spleen engorged and much larger than usual.

REMARKS.

Whilst the acute diseases of this little but important viscus are generally strongly marked during life, its chronic maladies are difficult of detection. Andral has remarked—and his statements are confirmed by equally eminent authority, that "the gall-bladder may be filled with calculi and even with pus; its parietes may be the seat of different alterations; its cavity diminished or disappeared; it may fail to receive bile through closure of the cystic duct, without any of these lesions producing during life any morbid symptoms which could indicate them." We cannot classify this case among the usual pathological phenomena of continued fever. Its history and development tend to date its origin anterior to the supervention of acute disease. Moreover, we have been unable to find among such researches a case of primary disease going on to perforation. Doubtless, this organ, like all others, is liable to be complicated in the course of fever; and Mr. Louis has made it the subject of observation: but whilst he admits that lesions of this organ are more common in typhoid than other acute diseases, all his cases are those of acute inflammation, confined to the mucous membrane lining the gall-bladder and ducts, and terminating in obliteration of the latter, and mere redness, softening, thickening, or suppuration in the former. He found them also following the usual law of other organs, viz., more frequently and seriously affected in cases early fatal. Thus, in those cases where the mucous membrane was palpably inflamed, the patients died on the 8th, 20th, and 28th days of the disease; and in all those dying between the first two periods the bile was copious; whilst in four fatal cases where the membrane was healthy the secretion was turbid and muddy, and in two in which closure of the cystic duct had occurred, the same

appearances as those noticed by Dr. Powell and others were present, viz., an aqueous, pellucid fluid, free from the tinge of bile in proportion to its duration.

It is stated by Dr. Budd, that ulceration of the gall-bladder is especially liable to occur in persons in whom it has suffered from former disease; and this seems to be the usual law governing the complications arising in the course of acute diseases. A case is cited where ulceration undoubtedly existed following acute inflammation, from which the patient was convalescing rapidly, but subsequently seized with malignant cholera, he suddenly died, and examination revealed a perforation of this viscus. From the same eminent source we find a case of typhoid fever, furnished by Mr. Bowman, bearing a striking resemblance, in some points, to that now under consideration. The patient died on the 11th day, and three ulcers were found surrounded by evidences of acute inflammation, extending through all the coats: the mucous membrane was thickened and indurated throughout its surface, and the cystic duct obliterated at several points by previous disease. Those who have observed the Walcheren, Sierra Leone, and yellow fever, in tropical climates, mention frequent cases of inflammation and ulceration of the gall-bladder; but from the frequency of the derangements in the biliary apparatus, to which the residents of those countries are subject, they would seem strongly to confirm the opinion above stated, although it is easy to conceive, in very malignant forms of fever, that inflammation in such an organ may proceed at once to gangrene and perforation. We may conclude, therefore, that perforation generally supervenes upon a previous diseased state of the gall-bladder, and very rarely appears in the course of acute disease without such cause. In the present case, had ulceration been the immediate result of acute inflammation, we should probably have seen an increase rather than the subsiding of febrile symptoms: moreover, these primary lesions occur in cases early fatal. Again, such lesion would probably have led to some local uneasiness in the region, at least, which was absent. The *post mortem* appearances, too, are those of a chronic difficulty confined to a small surface, and agree well with the previous history of the case. The primary causes of ulceration are more difficult of explanation. The healthy appearance of the greater portion of mucous membrane, the normal and pervious state of the ducts, as well as the entire absence of softening, thickening, hypertrophy, infiltration or suppuration, entirely preclude the idea of inflammation, propagated from the surface of the intestines. The absence of biliary calculi, of bony or earthy deposits and malignant disease, reduces us to the alternative of viewing it as one of those chronic ulcerations, similar to that met with in other hollow viscera, especially the stomach, and for which no primary cause can be given. Probably some abrasion existing at the time, continued fever supervened; the latter disease, with its well known character for altering the secretions, rendered the bile morbid and irritating, thus becoming a secondary cause of ulceration. Such morbid secretion brought in contact with the peritoneal coats of the gall-bladder, caused it to slough, and a similar passage of the fluid to the intestines may have induced the vascularity found in the duodenum. This chronic ulceration by contiguity of location, may have, as Mr. Twining of India first noticed, caused hypertrophy of the lymphatic gland, lying in the course of the cystic duct, and found in a high state of injection, thereby producing temporary occlusion of the passage, which

increased, if it did not cause the constipation, and was relieved by the stimulating action of cathartics.

Whether this accident occur from wounds inflicted, external injury, or as the sequel of former disease, its prognosis is eminently unfavorable. The period of such termination is materially affected by the character and manner of the injury, and the state of the individual at the time of its reception. Dr. Hennen, in his military surgery, says, "I have never known a patient recover from a wound of the gall-bladder:" indeed it is stated on eminent authority, that the only case of recovery is recorded by Paroisse, in which many years after the reception of a gun-shot wound, the ball was found in the gall-bladder. Rupture of the cyst from external violence is far less common than that of the liver. Of the five cases reported by M. Leseure, four were immediately fatal, and the fifth survived four days. The case of Dr. Skeete (London) lived 37 days, and the whole peritoneal sac formed one immense abscess. That of M.Campagnac lasted 18 days after rupture of the hepatic duct. In all these cases no external wound existing, some were doubtless expedited by the violence of the nervous shock, and others prolonged by the effusion of bile taking place gradually. The same may be said of Watson's case, which survived a bayonet wound 36 hours; Dr. Stewart's case, fatal in 7 days after a sword wound; and that of Mr. Sabatier, which lived only 3 days. The severity of these accidents is strongly illustrated in the experiments on living animals recorded by Dr. Thompson of Edinburgh, from which he concludes that healthy bile introduced into the peritoneal cavity, though rapidly absorbed, gives rise to very violent symptoms of inflammation, generally terminating in death; and Dr. Budds declares that rupture of this organ is much more speedy in its fatality, than that of the stomach or intestines.

When perforation occurs in the course of disease, we should not expect an immediate termination. In the present case it took place within 36 hours; and the case before cited, in which this accident supervened upon malignant cholera, survived about the same time. Of the two cases reported by MM. Cruveilhier and Andral, the former lived 40 and the latter only 12 hours. In the cases of Mr. Bowman and Mr. Hodgson, at the Birmingham Hospital, the time in which effusion took place is not mentioned; both, however, the one supervening on typhoid fever, the other after injury proved fatal, in 7 days after admission. Very few instances are reported in American journals: of these Dr. Rogers' case (Western Journal) survived 60, and Professor Drake's 72 hours.

In view of the circumstances under which this form of the disease generally exists, it is almost utterly hopeless to expect recovery unless the site of perforation, the constitution and disease of the patient, are peculiarly favorable. When the local affection becomes acute in its character, and is complicated with fever, aside from its difficulty of detection and diagnosis, we can hardly expect to combat a difficulty in which the greatest danger is to be feared from an irritating secretion of bile. Again, in a depraved habit, or one debilitated by acute disease, as in the present case, we may be disappointed in a sufficiency of constitutional power, to first withstand the shock of the effusion, or insure adhesion to a neighboring organ previous to its occurrence. We remarked at the post mortem, that around the second point of ulceration near the junction of the gall-bladder and liver, an essay had been made to prevent effusion, and this spot bore marks of active inflammation; but at

the perforated ulcer near the fundus its situation seemed unfavorable for this process; a considerable surface being in a state of sphacelation, the changes in the form of the gall-bladder, with the more frequent motions of the abdominal viscera, entirely precluded the possibility of union.

ART. IV.—*Indigenous Medical Botany, No.* 4. By STEPHEN W. WILLIAMS, M. D., late Professor of Materia Medica, &c. On the Medical Uses of several species of Violets.

THE genus Viola is very extensive. There are no less than fifty-seven species enumerated in the New Edinburgh Encyclopedia; nearly forty in all the States of America. At least twenty-four are found in the northern States; and ten or eleven species grow in this town. They are among the first plants which blossom in the spring. They beautify our meadows and woods with their elegant blue, white, and yellow petals. The properties of all of them are somewhat similar. The roots are esteemed to be mildly emetic and cathartic—the leaves are demulcent and laxative. The flowers and seeds are also laxative and pectoral. Rafinesque says that all the parts contain the violine, a particular kind of emetine.

But little, as yet, has been written or known in relation to their medical history and uses. It is for the purpose of redeeming them from their obscurity, and attracting the attention of medical practitioners to their uses, that I am induced to present the claims of a few of them to the public, through the medium of the New York Journal of Medicine and Surgery.

Something is said by the older writers upon Pharmacy and Materia Medica, of the virtues of the syrup of violets as a laxative for children, and as a test in chemical manipulations, which is prepared from the viola odorata, or sweet scented violet, and occasionally, I believe, from the viola tricolor. This syrup, from some cause, has, in a great measure, gone into disuse. To Salmon, Culpeper, Quincy, &c., we refer our readers to what was anciently written upon the subject of the violets, and confine our remarks to the history of some of the species of which I have forwarded you drawings.

The genus Viola is found in the fifth class, Pentandria, and first order, Monogynia, of the artificial arrangement of Linnæus, and of the natural order Violaceæ of Lindley.

Generic Description.—Sepals 5, unequal, prolonged into appendages at the base. Corolla unequal, two lipped, of 5 petals, the lower calcarate. Stamens 5, hypogenous, syngenesious, unequal, the two anterior having anthers that are often calcarate. Capsule bursting with elasticity, many seeded, three valved. Herbaceous plants (Lindley).

Fig. 1. *Viola Tricolor.*—Common English and vulgar name, pansies, heart's-ease, three faces under a hood, love in idleness, kiss at the garden gate, call me to you, herb trinity, merit neglected, garden violet, Johnny jump up, &c., &c.

Specific Description.—Stipulæ wing cleft, terminating at the end of the leaf-stalk; stem angular, branched; leaves egg-shaped, oblong, crenate deeply, calyx half the size of the blossom. Blossoms of a

variety of colors, blue, white, purple, &c. The flowers in this specimen are blue and yellow, the most common. It blossoms in our gardens from April to the middle of September. Although cultivated in gardens, it is indigenous.

Medical Use.—This plant is said by Strack (Lond. Med. and Phys. Jour., vol. 2) to be highly efficacious in crusta lactea, and the scabby eruptions of children. He boils a drachm of the fresh, or half a drachm of the dried leaves in half a pint of milk, and gives the milk strained, night and morning, for several weeks. More recent authority confirms Strack's opinion. With this decoction crumb of bread is added, to form a poultice, to be applied to the part. The eruption increases under this treatment, the first eight days; but when the medicine succeeds, the urine has the odor of the cat, which smell, after a few days, passes off, the scabs fall off, and the skin is restored to its natural state. *Haase* used this violet in large doses in numerous chronic complaints; and Woodville thinks, from the numerous instances of success, it is well deserving of further trial. The ancients recommended it highly in epilepsy, asthma, ulcers, scabies, and cutaneous eruptions. They are still used in Italy in tinea capitis (Lindley). The leaves, when bruised, have the smell of peach kernels, and they are thought to contain prussic acid.

Fig. 2. *Viola Cucullata.*—Common blue violet, heart violet, meadow violet. *Specific Description.*—Glabrous. Leaves cordate, serrate, coiled (or rolled at the base), scapes of the length of the petioles; petals bent obliquely, lateral ones branded. Petals all whitish at the base. Perennial. Flowers blue—found in all places. Blossoms in May (Eaton). Here it blossoms somewhat earlier.

Medical Use.—This plant is very mucilaginous. A strong decoction of it is successfully used in cases of strangury, suppression and retention of urine, and all those affections of the urinary organs which require mucilaginous medicines—in all inflammations of viscera, diarrhœa, dysentery, &c. It is found in abundance in our fields, and families can easily supply themselves with this useful article.

Fig. 3. *Viola Pedata.*—Bird-foot violet, parsley violet, pedate violet. *Specific Description.*—Leaves many parted, pedate, divisions lance-linear, subcutive. Divisions of the calyx linear, acute. Perennial. Blossoms blue; flowers May (Eaton). Sandy grounds.

Medical Use.—This plant is used for the same purposes as the viola cucullata, and is considered to be more mucilaginous. An elaborate and well written article was published on the subject of this violet, in the *Boston Medical and Surgical Journal*, vol. 19, 1839, by my venerable friend, Dr. Oliver Partridge, of Stockbridge, Mass., then in the eighty-ninth year of his age. He is still living, in his ninety-sixth year, and even now writes for the medical journals. He says that it has been used in Western Massachusetts, for a long time, under the name of parsley violet, which name it received from an Indian in 1696. It would appear that the Indians kept the remedy secret; but some of the roots set out and cultivated in a garden, proved to be the parsley violet. His father, for many years, found great relief from it in nephritis, and it has since been used by Dr. Partridge as a shop medicine, for more than sixty years. He esteems a tea made of these violets as an excellent mucilaginous diuretic, so much so, that he has known it to affect the urinary vessels in such a manner as to promote the passage of calculi

into the bladder, and to bring them off. He further says, that "it has also relieved a spasmodic dysuria, and is a valuable medicine in disorders of young children, and been often of use in complaints of child-bed women—making a palatable drink not improper in a fever, and a little sweetened, rarely refused even by timorous little ones. I doubt whether a substitute can be found to operate with so much ease, and so good effect, without any consequent debility of the vessels, which is probably owing to the peculiar mucilaginous quality of the herb. I think the article ought to be introduced into the Materia Medica, and also cultivated, lest the agriculturalists, in their zeal for improvement, should eradicate it, which I should consider to be a loss. They are to be found on the head lands of old plough fields—on the plains in the valley of the Connecticut river, in this State, which was formerly covered with yellow pines. The largest growth of the said violets I ever saw, was north of Westfield town, on the old road as I went to Northampton, some years ago, in May. Near the middle of said month they are in bloom, when they ought to be gathered, root and branch, dried well in the shade, inclosed then in paper bags (double) and secured from moisture. I have thought a tea from them to be best made with water not boiling, but simmering hot, and the second steeping as good, if not better than the first, if made seasonably. The main root, which is not larger than fine wire, ought ever to be bruised before steeping." The Doctor then gives three or four remarkable cases where the patients were greatly relieved, if not cured, by the use of this violet. He describes the case of an old gentleman, whom he overtook on a journey to Saratoga Springs, more than thirty years ago, who was greatly afflicted with nephritic complaints, and who was often obliged to resort to the use of the catheter. After riding a few miles his pain was so severe as to compel him to stop. He was very much disheartened, and thought he should be obliged to remain and die there. He had been taking what the Doctor supposed to be a saponaceous and anodyne medicine, with no relief. He persuaded him to lay aside this medicine, and use the violet tea. He retired into a warm bed at half past 5 P. M., and took two teaspoonsful of elixir asthmatic, and drank plentifully of the violet tea. At 11 o'clock he was so comfortable that the Doctor went to bed, directing the attendants not to omit the tea. He probably drank more than a quart. His water flowed with ease, and plentifully, during the night, and the next morning he was quite comfortable. He noticed at the bottom of one of the urinals five calculi, which he saved, two of the size of radish seeds, and three of cabbage seeds. The next day he rode eleven miles, and the third about thirty, to Saratoga. On the Sabbath, about two days after, he was out at meeting two miles. In the night the Doctor was called to him, and found him using his catheter. The violets were used again, and he was comfortable the next day. He resorted to the Congress Springs, which proved of lasting benefit to him. Dr. Partridge remarks: "The particular efficacy of these violets in disorders of little ones, who cannot tell their sufferings, is such, from their mucilaginous and diuretic qualities, that I cannot think of a substitute, especially when, from attentive observation, I find that something of the kind is needed; and for the benefit of these patients alone, I think these violets are worthy of notice." I would particularly recommend the attentive perusal of the above article in the *Boston Medical and Surgical Journal*, to my professional brethren, having given but a very short abstract of the most important parts of it.

Fig. 4. *Viola Ovata. Synonym. Viola primulifolia.* Rattlesnake violet. The principal part of the following observations upon this plant I published in the *American Medical Journal*, with a wood cut, in Feb., 1834; you may, therefore, give that journal credit for the article, although I have made many additions to it. It strikes me that its importance will justify its republication, inasmuch as it has been favorably noticed by other journals. I should be very unwilling to have it omitted in connection with my other remarks upon the subject of the violets generally.

Specific Description.—Nuttal thus describes it. Leaves ovate, subcordate, crenate, rather acute, often lacerately toothed at the base; equally, and for the most part conspicuously pubescent on either side; petiole marginated; scape shorter than the leaves; segments of the calyx subciliate, petals obovate, the two lateral ones branded. On dry land; flowers bright blue, flowers in April and May. (North Amer. Gen.) I have ventured to give it the English name of Rattlesnake violet, from the fact that it is generally known here by the name of the rattlesnake plantain, from its efficacy in curing the bite of that reptile.

Medical Use.—The fact which I shall relate with regard to its efficacy in arresting the direful effects of the deadly rattlesnake may be implicitly relied on. Dr. Wells, when living, was considered one of the most eminent, judicious and observing physicians which Massachusetts has ever claimed. His medical precepts and opinions are treasured up by many of his successors with religious veneration. [*See my Memoir of him in my American Medical Biography, page* 609.]

Let it not be objected to the *viola ovata*, that we are not acquainted with the active principle of the plant, except what is given under the general head of the genus Viola above, which thus rapidly arrests the progress of one of the most terrible accidents to which humanity is liable. The principal substance which can be extracted from it is mucilage, and this is best done by infusion in water. It yields a greater proportion of it than any of the violets, and nearly as much as the same quantity of slippery elm (*ulnus fulva*); hence it is much in use in dysentery, diarrhœa, strangury, and other affections of the urinary organs. This is the principal substance which has been detected. I cannot persuade myself that its specific qualities reside in the mucilage, for other substances yield mucilage in greater abundance, and they are not considered alexipharmic. We ought always to be governed by facts rather than theory. Who can explain the reason why variola vaccina protects the system against the ravages of the small-pox? And yet who can doubt the fact? If we can establish the prophylactic qualities of the rattlesnake violet upon as firm grounds, or if we can be instrumental in saving the life of a fellow being laboring under the effects of the bite of this venomous reptile, our object will be accomplished.

Many years ago, rattlesnakes abounded in the vicinity of this place; since the land is cleared they are rarely to be seen. Our old people were in the habit of using this violet for their bites. They generally know the plant by the name I have designated. The venerable Henry Wells, M. D., late of Montague, Mass., successfully employed it in these cases. To his statement respecting it, I wish to draw the attention of physicians. He was called to a patient who was bitten by a rattlesnake, and who was laboring under all the symptoms of a diffusion of the venom. His body was enormously swollen, respiration laborious, and his skin livid. He immediately directed a strong infusion of the rattlesnake

violet, and constantly bathed the wound and body with it. In a few hours the tumefaction subsided, the febrile symptoms abated, and the patient was considered out of danger. He retired to rest, and gave directions to the nurse to give the violet tea often during the night. The patient continued so much better that the nurse became negligent, and omitted the directions, and fell asleep. From this suspension of the remedy, the patient relapsed, the febrile symptoms returned, and the body was swollen like a puff ball. The doctor was called, and again directed the remedy as before mentioned; the symptoms yielded, and from a continuance of the remedy two or three days he completely recovered, without the use of any other means. Dr. Wells related the above fact to my father, who was formerly a physician in this town, and at the same time showed him the plant, which my father perfectly recollected when I collected it for preservation in my herbarium.

My grandfather, Dr. Thomas Williams, formerly of this town, was in the constant habit of using a plant for the bite of the rattlesnake, which he called the rattlesnake plantain, and he was uniformly successful in the use of it. His practice as a physician and surgeon was very extensive. I have no doubt it was the violet now under consideration. I have within a few days ceased visiting a little patient who says, that a short time before I was called to him, he was bitten by a small green snake upon the top of his foot. Not long afterwards he was attacked with pain in his leg, attended with considerable swelling and high fever. I did not see him until he had been laboring under these symptoms some time. When I first saw him I did not apprehend that the fever, tumefaction, &c., proceeded from the bite of the snake, for I was not aware that the bite was venomous. I put him upon the antiphlogistic plan of treatment, and applied the vegeto-mineral water to the inflamed leg. The next day I visited him, and found his symptoms aggravated, and the swelling increasing. I threw aside the mineral water and directed emollient fomentations with the rattlesnake violet, and a poultice made with bran strained into the liquor of the infused leaves. The next morning I was highly pleased with the success of the applications. The tumefaction had subsided, and the fever abated. I left him under a confident expectation that he would soon recover. In the course of the afternoon, however, an officious intermeddling old woman sent word to the parents of the patient that my applications were improper, and that nothing would cure him but a cold application of leaves of house-leek (sempervivum tectorum), which was accordingly applied. The consequence was an universal chill, succeeded by delirium, and intense burning fever, from which he was not relieved under several days. He was immediately attacked with pain and inflammation in the groin of the other leg, attended with a good deal of swelling. I was immediately sent for, but could not go till next morning. I directed the violet fomentations and poultices again. In about a fortnight suppuration occurred, and I let out about half a gill of pus from the tibia, about half way between the knee and instep. The other leg continued swollen three or four weeks longer, when, by the continued application of the violet poultice, it subsided. Caries of the bones of the bitten leg succeeded, large portions of which were taken away, both above and below the knee. Carious bones were discharged from fistulous ulcers for many years, and this leg is now (1846) shorter than the other.

I have since used the infusion of this violet, and a fomentation with

the leaves of it, in an obstinate case of chronic inflammation of the eyes, which had resisted the long continued use of a great variety of remedies. The patient had used the slippery elm, and various other mucilaginous medicines, with no success; in fact, with rather an aggravation of the complaint. Within a fortnight from the time she commenced with the violet infusion, no traces of inflammation about the eyes remained; so it appears it must be some other quality in the violet than its mucilaginous property, which must have effected the change. I am now using it extensively in the phlegmasiæ, both acute and chronic.

Rafinesque speaks of the viola *canadensis* and *blanda*, whose roots are bitterish acid, tonic, in doses of ten grains, purgative 25 to 30, emetic 40 to 50; also used as depurative in diseases of the skin. He says, "We use chiefly viola *clandestina*, *rotundifolia*, *palmata*, *heterophylla*, sometimes called *heal-all*. Leaves emollient, suppurative, used for wounds and sores, bruised or in poultices. Elliot says the negroes eat the leaves of the two last in soups."

The violets which received such encomiums as the following from old Culpeper, nearly two hundred years ago, cannot be inert or useless:

"All the violets are cold and moist while they are fresh and green, and are used to cool any heat or distemperature of the body, either inwardly or outwardly, as inflammations in the eyes, in the matrix, or fundament, in imposthumes, also, and hot swellings, to drink the decoction of the leaves and flowers made with water in wine, or to apply them, poultice-wise, to the grieved places; it likewise cures pains in the head caused through want of sleep, or any other pains arising of heat, being applied in the same manner, or with the oil of roses. A drachm weight of the dried leaves or flowers of violets, but the leaves more strongly, doth purge the body of choleric humors, and assuages the heat, being taken in a draught of wine or any other drink; the powder of the purple leaves of the flowers only picked and dried and drank in water, is said to help the quinsey and the falling sickness in children, especially in the beginning of the disease. The flowers of the white violets ripen and dissolve swellings. The herb or flowers, while they are fresh, are effectual in the pleurisy and all diseases of the lungs, to lenify the sharpness of hot rheums and the hoarseness of the throat, the heat, also, and sharpness of reins, and all the pains of the back or reins and bladder. It is good also for the liver and the jaundice and all hot agues; but the syrup of violets is of most use and of better effect being taken in some convenient liquor, and if a little of the juice or syrup of lemons be added to it, it cools the heat and quenches the thirst, and gives the drink a claret wine color, and a tart relish, which is pleasing to the taste. Violets made up with honey, cleanse and cool with sugar contrarywise. The dried leaves are accounted among the cordial drinks, powders, &c. The green leaves are used with other herbs to make plasters and poultices to inflammations and swellings, and to ease all pains whatsoever, arising of heat, and for the piles also, being fried with yolks of eggs and applied thereto."

Deerfield, Mass., Aug. 27, 1846.

ART. V.—*The Ganglionic System of Nerves.* By MOSES GUNN, M.D., of Ann Arbor, Michigan. (An Inaugural Thesis. Presented to the Faculty of Geneva College, for the Degree of M.D., Feb., 1846.)

To the practitioner of medicine who skilfully and successfully discharges the duty of his profession, a knowledge of no subject is of more importance than that of nervous relation; and to the eager inquiries after truth in the mysteries of nature, there is open no wider or more enticing field than that which is presented by that portion of the nervous system, which we propose briefly to consider.

Over the functions of the Ganglionic system of nerves, for ages, there hung a mysterious darkness which has only been dissipated by the accumulated and accumulating light of modern research.

Happy is it for us who are but just entering the paths of science, that there are suns in the firmament of our profession, whose rays have pierced that darkness, and thrown a welcome light around its mysteries.

Guided by that light, let us approach the subject proposed; and first, let us study the Anatomy of the Ganglionic nerves.

The term ganglion used in the earlier days of anatomy to denote a swelling in the theca of tendons, now admits of a wider application, and is used to designate an enlargement of a nerve, or an addition of nervous matter to a nerve, constituting a nervous centre.

Nervous ganglia admit of two general divisions. The ganglia situated on the posterior roots of the spinal nerves, and on the fifth, and par vagum and glosso-pharyngeal of the eighth, together with the otic, tenticular, spheno-palatine, naso-palatine, and sub-maxillary ganglia, constitute the first division.

The second embraces those of the great sympathetic or tri-splanchnic nerve.

The first general division consists of—

1. *The Spinal Ganglia.*

Along the whole length of the spinal axis situated on the posterior roots of its nerves, we find a series of tubercles; these are the ganglia of the spinal nerves. Of these we shall learn more when we examine the second general division.

2. *The Ganglion of the Fifth Nerve.*

The fifth nerve, immediately that it has passed over the internal point of the petrous portion of the temporal bone, forms upon itself the *Casserion* ganglion. This nerve resembles those of the spinal axis, in that it has its origin by two roots, the one being composed of motor, the other of sensitive filaments; the sensitive portion having upon it the ganglion. Nor does the similarity end here. In the spinal nerves, we see that their ganglia have no direct communication with the sympathetic, but only by branches from the nerves towards their distal extremity. So in the fifth, we see that the Casserian ganglion has no direct communication with that nerve, but like the spinal nerves, only by branches given off after the nerve has passed the ganglion. This nerve then may be ranked with the spinal nerves.

The Ganglion of the Par Vagum.

Immediately beneath the case of the skull, we discern upon the par vagum its ganglion. This ganglion gives off a small twig, which, entering a canal which opens into the jugular fossa, passes to the aqueduct of Fallopius, there to join the facial nerve. It communicates with the

spinal accessory and glosso-pharyngeal, sending also filaments *directly* to the sympathetic.

4. *Ganglion of the Glosso-pharyngeal.*

The glosso-pharyngeal nerve, as it emerges from the cranium through the foramen lacerum, presents a ganglion named, from its situation, the *ganglion petrosum.* From the ganglion, we have given off the tympanine branch of the glosso-pharyngeal, or the nerve of Jacobson.

Emerging from the ganglion, this nerve enters a small canal, the orifice of which is seen in the jugular fossa. Through this canal, it passes to the tympanum, where it divides into three branches, one passing upwards through an osseous canal to join the vidian nerve, another upwards through a canal which terminates in a groove internal to the hiatus fallopii, passing which it bends downwards to join the otic ganglion, while the third passes down through a similar canal to join the carotid plexus. Here, then, we trace the connections of the ganglion of the glosso-pharyngeal with—

1. The vidian nerve, which is connected with the sympathetic, thus indirectly linking the ganglion with that nerve.

2. With the otic ganglion, which has also connections with the sympathetic, thus forming another indirect communication with that nerve, and—

3d. With the sympathetic *directly* by the branch to the carotid plexus.

5. *The Otic Ganglion.*

Beneath the inner edge of the posterior portion of the great ring of the sphenoid bone, we have the situation of the otic ganglion, supported externally by the third division of the fifth nerve. It is bounded internally by the cartilaginous portion of the eustachian tube and the origin of the tensor palati muscle. Passing up behind it, we have the middle meningeal artery, previous to its entering the foramen spinale. Isolated as this ganglion is from any other nervous trunk, it receives branches from three sources.

1. From the third division of the fifth pair, particularly its motor portion.

2. From the tympanine branch of the glosso-pharyngeal, by a twig which we have seen bending down from the groove internal to the hiatus fallopii.

3. Forming its *direct* communication with the sympathetic by filaments that it receives from the portion of that nerve which forms a plexus around the middle meningeal artery.

6. *The Senticular Ganglion.*

This ganglion is situated within the orbit between the optic nerve and external rectus muscle. Its branches are four.

1. It sends numerous filaments forward to the globe of the eye, which pierce the sclerotic, and pass forward between it and the choroid coat to ramify in the iris.

2. It receives a twig from the nasal branch of the ophthalmic division of the fifth.

3. A small filament from the inferior oblique branch of the motores oculorum.

4. Accompanying the nasal branch, it receives a filament from the carotid plexus which links it to the sympathetic.

7. *Spheno-palatine, or Meckel's Ganglion.*

Deep in the pterygo-maxillary fissure, just beneath the point where

the superior maxillary nerve crosses the fissure to enter the infraorbital canal, we have the situation of this ganglion.

It has four sets of branches.

1. Superiorly it receives two small twigs from the superior maxillary nerve as it crosses the fissure.

2. It gives off anteriorly the spheno-palatine nerves, which, passing through the foramen of that name, enter the nares, ramify upon the spongy bones, and terminate in the naso-palatine ganglion.

3. Inferiorly it gives off two branches, one of which, passing through a small foramen in the palate bone, supplies the velum pendulum palati. Another and larger branch descends in the posterior palatine canal, and passing under the arch of the palate bone, supplies the gums with twigs, and terminates where we saw the termination of the spheno-palatine nerves, viz , in the naso-palatine ganglion.

4. Posteriorly this ganglion sends off a considerable branch, which enters and passes the pterygoid canal; here it divides into two branches, a superior and an inferior. This is the vidian nerve. Its inferior branch descends and enters the carotid canal to join the carotid plexus, thus directly connecting Meckel's ganglion with the sympathetic. Its superior branch follows closely the inner edge of the posterior portion of the great ring of the sphenoid bone, then mounting the petrous portion of the temporal bone, it passes beneath the dura mater and enters the hiatus Fallopii. Joining the portio dura in the aqueduct of Fallopius, it passes to within a few lines of the stylo-mastoid foramen; there leaving it, the vidian enters the tympanum by the apertura chordæ and takes the name of chorda tympani. Crossing the tympanum, this nerve passes out at the Glasserian fissure to join the gustatory, which it soon leaves, and terminates in the sub-maxillary ganglion.

8. *The Naso-Palatine Ganglion.*

Taking its name from its situation, we find this ganglion in the naso-palatine canal. It is an azygous ganglion, and receives the anterior and inferior branches of Meckel's ganglion, by which it is connected with the sympathetic.

9. *The Sub-Maxillary Ganglion.*

This ganglion is situated on the superior surface of the sub-maxillary gland, and receives the terminal extremity of the superior branch of the vidian, by which it is brought in connection with the sympathetic.

We have now described the first, and traced its extensive connections with the second general division of nervous ganglia, which we made to consist of the ganglia of the—

GREAT SYMPATHETIC NERVE.

This nerve consists of a chain of ganglia extending from the second cervical vertebra to the coccyx on either side of the vertebral column, and a series of ganglia and plexuses anterior to that column. The former may be termed the lateral, the latter the prævertebral portion of the sympathetic.

The lateral portion consists of twenty-four ganglia on either side, united below, as it were, by a single azygous ganglion. Three of the ganglia are situated in the neck, and are termed cervical ganglia, twelve in the thorax corresponding with the head of each rib, termed thoracic ganglia, four in the abdomen termed lumbar ganglia, and four in the pelvis called sacral ganglia.

Each of these ganglia receives a branch of communication from the spinal nerves, thus bringing in connection the ganglia of those nerves. They also send cords to each other, thus forming a complete chain, and branches forward to communicate with the prævertebral ganglia, and assist in forming the prævertebral plexuses. These are connections common to the whole chain, but with the superior cervical ganglia we find more extensive communications. It is this ganglion which gives off branches to form the carotid plexus, through which we have the extensive connections already described when speaking of the ganglia of the fifth, par vagum and glosso-pharyngeal of the eighth, together with the otic, lenticular, spheno-palatine, naso-palatine, and sub-maxillary ganglia.

It also sends filaments to the sixth nerve; and a continuation of filaments from the carotid plexus along the anterior arteries of the cerebrum establishes a communication with a small ganglion (ganglion of Ribes) situated on the arteria communicans cerebri.

The prævertebral portion of this nerve is composed of the pulmonic plexus, the cardiac ganglion and plexus, in the thorax, and the semilunar ganglion and solar plexus in the abdomen.

1. *The Pulmonic Plexus.*

This plexus, composed as it is principally by filaments from the pneumogastric, perhaps should not be, and indeed, by anatomists is not, described as forming a portion of the sympathetic. But we shall thus describe it, and our motives for so doing will become obvious when we come to speak of its influence on the functions of respiration. As the pneumogastric enters the thorax, it sends off five or six small branches, which join some filaments from the recurrent branch to form the anterior pulmonic plexus. As the nerve passes down, it applies itself to the posterior surface of the bronchus, and enlarging, *assumes the pearly tint of the sympathetic.* Here it gives off branches, which, uniting with filaments from the three superior thoracic ganglia, form the posterior pulmonic plexus. Branches from this plexus ramify upon the bronchi through the lungs, extending quite to the air cells.

2. *The Cardiac Plexus and Ganglion.*

The anterior branches of the cervical ganglia, descending, enter the thorax and interlace with a few branches from the pneumogastric and its recurrent branches upon and behind the aorta, forming a plexus which supplies the heart with its nerves. The ganglion is formed just under the arch of the aorta, between its origin and the origin of the pulmonic artery, and to the right of the ductus arteriosus. It is of considerable size, being from half to three-fourths of an inch in length, and it receives the middle cardiac nerve, a branch from the middle cervical ganglion. This ganglion, we shall hereafter see, presides over the motions of the heart.

3. *The Semilunar Ganglion and Solar Plexus.*

Proceeding to the abdominal cavity, we find, just under the diaphragm, and situated upon its crura, on either side of the cœliac axis, the semilunar ganglia. These ganglia, as their name indicates, are of crescentic shape, and receive, each from its own side of the vertebral column, the great splanchnic nerve, which is formed by filaments from the sixth to the ninth or tenth thoracic ganglia inclusive.

Thus formed, this considerable nerve pierces the crura of the dia-

phragm to join the semilunar ganglia. These ganglia are connected with each other by a slip which passes under the cœliac axis, and from their anterior surface we find them connected by filaments with eight or ten small bodies of similar structure with themselves. These bodies are also connected with each other by filaments, and they with their connections constitute the *solar plexus* from which, as from a common centre, radiate nerves to form plexuses, named according to their destination.

Thus we have the coronary or stomachic plexus, the splenic plexus, the hepatic plexus, the renal plexus, the spermatic plexus, and the aortic plexus. This is readily understood when we consider the vascular anatomy of this region.

The arteries support and guide the nerves to their distribution, and both arteries and nerves receive their names from their destination.

We have now briefly described the anatomical relations of the ganglionic system of nerves. We have seen its relations to the cerebro-spinal system, and traced the connections of its ganglia with each other, and found that no ganglion is isolated from the rest, but that, commencing at any one ganglion, we can trace its connections to every other without travelling a line upon either brain or medulla spinalis. We have between the two systems the most intimate connections, but were the brain and spinal cord entirely removed, the ganglionic system would still remain intact. Anatomists formerly described the sympathetic as arising from the brain; but from it to the brain, we cannot trace a single filament. We can and have traced its connections with the sixth and third nerves, and also with other cerebral nerves which have ganglia upon them; but between the cerebro-spinal axis, and the substance of the sympathetic, we can find no direct continuation of nervous matter.

But admitting that it has an origin from the cerebro-spinal axis, by its communication with the sixth and the filaments it receives from the spinal nerves, we have an amount of nervous matter in the thoracic and abdominal cavities, together with the prolongations to every part of the system, which exceeds many times that of the admitted origin. Now what are we to infer from this increase of nervous matter? Is it not this, viz., that the nerve has within itself the property of evolving its own substance, or plainly, that it has an independent existence? If so, then why seek for an origin in the brain or spinal cord? Certainly, if it has an independent existence, it needs no origin; and as its anatomy leads us to this belief, so we find that its physiology confirms it. It is by such reasoning as this, that we are taught to believe that the ganglionic is an independent nervous system, and possesses properties differing materially from those of the cerebro-spinal system. Now in what does this difference consist? Numerous experiments have answered this question, but let us reserve them for illustration.

In animals we have two kinds of life—the one vegetative or organic, the other is that which constitutes the animal—which make the animal differ from the vegetable, viz., animal life, or the life of relation. This life, in the simplest form, consists of a degree of *mind* or intelligence by which the animal *receives impressions*, and *acts* according to those impressions.

It is an appendage to the organic life, which makes that life subject to it, but is dependent on that life for its own existence. Organic life is under the control of animal life, but though the latter holds the reins of

government, it exists only by the existence of the former. The governor lives only by the life of the governed.

As we ascend the scale of being, we find the animal life predominating and exerting a powerful influence over the organic life; yet still it lives only by the life of the organism, and as organic life declines, so declines the power of the animal. In man we have the perfection of both organic life and the life of relation; for as the latter mysteriously works, and by its workings guides and controls the former, so the former supports itself by a complicated process, the derangement of which may hurl the latter from the throne, causing the destruction of both.

Having now drawn the line between organic life and the life of relation, let us see which portion of the nervous system presides over each. There can be but little doubt that the cerebro-spinal system is the moving spring of animal life. Indeed, it admits of a direct proof;—if the brain suffers from disease, the mind suffers in proportion; if the spinal cord be compressed at any point, so as to interrupt nervous influence, the parts below that point become powerless and senseless. Disease and accidents afford daily proof of the functions of this system.

(To be continued.)

ART VI.—*A Case of extensive suppurative Hydatid Cyst of the Liver, treated successfully.* By THOMAS ALEXANDER, M. D., Surgeon in the British Army.

ON the 6th July last, I was called to visit professionally, Miss P., a young lady, aged 20, who had in the preceding March arrived in this country from the West Indies, where, on inquiry, I found she had resided about twelve months; and, during that period, had experienced a severe attack of fever. I also learned, that since her arrival here, she had not enjoyed good health; having frequently suffered from uneasiness, and a sense of fulness in the epigastrium; and about the middle of June, a distinct swelling presented itself in the epigastric region.

This gradually increasing, and becoming painful on pressure, she was cupped, leeched, and blistered, by the advice of her medical attendant, on the 28th June; she had also taken mercury in sufficient quantity to produce by this time, gentle ptyalism. It did not appear, while in the West Indies, that she suffered from any other serious attack of disease than the fever alluded to, which probably was of the bilious remittent character.

The following were the symptoms which presented themselves when the case came under my care, viz.: considerable emaciation; pallor of the face and lips; a clean, smooth tongue, yet urgent thirst; a rather favorable expression of eye; occasional rigors, with copious nocturnal perspirations, and at times looseness of the bowels; the pulse 140, small, and sometimes counted with difficulty; anxiety, with great and increasing debility, loss of appetite, and nausea, with pain when any considerable pressure was made over the epigastrium: here, as well as in the right hypochondrium, a large, bulging, yet diffused tumor presented itself; most prominent towards the centre, yet not acuminated, or

pointing, nor were the integuments in any degree inflamed, although considerably on the stretch.

At the most prominent part of the swelling, however, on careful examination, obscure fluctuation was perceptible; and as the skin upon the trunk was in a jaundiced state, the conclusion that an extensive abscess existed in the liver appeared to me almost certain; the more especially, as the lower margin of this organ, apparently enlarged, could be distinctly traced by the fingers, extending beyond the false ribs, and downwards into the right lumbar region. Under this impression, I ordered cataplasms to be applied to the epigastrium; diffusible stimuli (wine) to be given freely, together with light, nourishing diet, and small doses of quinine, to support strength; also an anodyne at bedtime. After a few days the fluctuation having become somewhat more distinct, and as the symptoms generally were hourly becoming more urgent, without any apparent probability of the matter ever reaching the surface, I determined upon giving vent to it, as offering the best, indeed, in my mind, the only chance of recovery; and was glad, in consultation, to find my opinion supported by Mr. Henry, the principal medical officer in this command, and Dr. White, Surgeon of the Rifle Brigade.

Accordingly, on the 14th of July, the operation was performed (in their presence), by pushing a large sized trochar into the most prominent part of the tumor, a little to the right of the linea alba, and about four inches above the umbilicus. Previous to reaching the cyst or abscess, the instrument appeared to pass through a firm texture, of about an inch and a half in depth. On withdrawing the stilet, several ounces of a whey-like fluid first rushed through the canula; then a highly offensive, purulent matter, in considerable quantity. The discharge having ceased, notwithstanding firm pressure maintained by means of a broad, flannel roller, which had been pressed round the body, a probe was introduced through the canula, and moved about freely, upon withdrawing which, several hydatids, of various sizes, made their escape; some entire, others had burst, and were pulled out in the form of membranous shreds.

As the patient was now greatly exhausted, it was thought prudent to desist from any further attempts to empty the abscess. The canula was therefore withdrawn, and a portion of lint introduced to keep the wound open.

During the several succeeding days, from four to six ounces of offensive matter, mixed with hydatids, were twice daily pressed out at the wound. This was generally accomplished with more or less difficulty, on account of the hydatids, or their broken membranes, obstructing its internal opening. Generally when a large hydatid was extracted by pressure on the forceps, a gush of purulent matter suddenly followed.

This, however, was often as suddenly stopped by fresh hydatids getting into the opening, and these could not at all times be removed by the introduction of a probe, or gum elastic catheter. On the evening of the 21st, I succeeded in extracting a very large, empty hydatid sac, which was immediately followed by a discharge of healthy pus, amounting to nearly two quarts. This afforded the greatest relief, and from this time a remarkable improvement took place in the patient's general health. On the morning of the 22d, healthy colored bile was observed to ooze from the wound in considerable quantity, both by Dr. White and myself. On the 25th the bowels were reported regular; the evacuations natural; the appetite good; the perspirations to have ceased; and

the two preceding nights to have been passed without the assistance of an opiate. The pulse, however, was still rapid. On the 26th and 27th, bile continued at times to be discharged, and a watery fluid to ooze out in such quantity as to saturate the bandages, and even the bed-linen. On the 28th, after the introduction of an elastic gum catheter, about ten ounces of matter escaped. On the 29th there was increased tumefaction of the epigastrium; and fluctuation, with some discoloration of the integument, perceptible about three inches below the wound. Here, an opening was made by means of a lancet, and vent given to a considerable quantity of matter, as well as hydatids. By the 2d of August the upper wound had closed, but from the lower, several ounces of offensive matter, together with hydatids, were daily discharged, and the patient complained much of the matter irritating the surrounding skin.

The general health, however, continued slowly to improve, and by the 27th she was able to leave her bed, and remain up for an hour. From this period until the 14th she got up daily, and seemed to be going on remarkably well, but on this day the epigastrium was observed to have again become tumid; and on the ensuing night she was seized with rigors. On removing the dressings in the morning, a portion of broken hydatid was observed by the nurse projecting from the wound. This being removed, and proving of extraordinary size, was followed by a discharge of pus mixed with broken hydatids, amounting to a quart. She still, however, continued to gain ground, until the evening of the 17th, when she was seized with vomiting and griping, with purging of the bowels. This attack, (probably produced by some indiscretion on the part of the patient) was of short duration, but productive of much temporary exhaustion. By the 19th, notwithstanding, she had so far rallied as to be again able to get out of bed; and by the 25th had improved so much, as to be moved without any risk, or inconvenience, in a carriage to another lodging, at a considerable distance. From this period, she made rapid progress, and by the 1st of September was able to embark on board the steam packet, for Boston, on her way to join her friends in Canada.

After removal to her new lodgings, she passed the greater part of the day either seated or reclining on a sofa; she eat well and slept soundly, and the bowels were easily regulated. The epigastric region had assumed a perfectly natural appearance, and the discharge (healthy) from the wound, still kept open by means of a small tent, varied from a few drops to about half an ounce daily.

REMARKS.

This appears pretty clearly to have been an instance of a Hydatid Cyst in, or attached to, the liver, converted into an abscess, by its inner coat taking on, from some exciting cause, suppurative inflammation. Whether one or two cysts originally existed, was not clearly ascertained; but the latter appears to be the most probable conclusion, for bile escaped from the upper wound only. The fact of healthy bile having been discharged for several successive days, and in very considerable quantity, appears a remarkable feature in the case, and seems to denote that the abscess either extended into the substance of the liver, or that, a large biliary duct opened into the cyst; a circumstance not very explicable, although in the dissection report of the case of hydatid abscess

that occurred to Valsalva, it is stated, "that the biliary duct communicated with the abscess by a large orifice, and was dilated throughout the whole of its extent." I am not, however, aware that any authenticated case is on record, in which it appears that bile escaped from an artificial opening made to give exit to matter or other fluid from a hydatid cyst.

At the period when it became a question of great importance whether vent should be given by an operation to the matter; it was altogether uncertain whether adhesion had taken place between the cyst and the parietes of the abdomen (although fully aware of the difference of opinion among the profession regarding this point), yet the debility of the patient, the great disturbance of the system, and the unchanged state of the superimposed integument rendered it extremely probable, that without the adoption of this measure the patient must either have sunk before the matter had reached the surface; or it must have burst into the cavity of the peritoneum, or at least into some one of the neighboring viscera. It was clearly then, as the event shows, giving the patient the only, or at least the best chance of recovery.

The early treatment, while the pulse ranged about 140, may appear somewhat singular; for during seven or eight days in succession from the time I first saw the case, upwards of a bottle of wine, together with several small glasses of ale or porter, were daily administered, and to the no small surprise of the attendants, without producing any intoxicating effects. The stomach fortunately remained retentive, and the patient even in some measure relished the treatment, a circumstance which encouraged me to persevere.

After the time specified, however, its good effects became doubtful; it was therefore gradually diminished, more particularly as the symptoms were now less urgent, and the patient herself had become adverse to stimuli of every description. Quinine in solution was regularly continued throughout, and strict attention was paid to diet; nourishing food, in the smallest possible compass, being preferred. The bowels were chiefly regulated by small doses of castor oil disguised in milk and sugar. The interesting nature of the case has induced me to be thus minute.

If I am permitted to draw a practical conclusion from a single case, it would be that diffusible stimuli ought to be administered in larger quantity than is usually recommended by the profession, in many of those cases in which large abscesses have formed, and are about to be opened, as the best means of preventing those fatal derangements of the general system, which, under such circumstances, but too frequently result.

ART. VII.—*Typhoid Termination of Acute Inflammation.* By G. C. MONELL, M. D. of Newburgh, Orange Co., New York.

(Concluded from our last number, p. 216.)

IN considering the treatment proper for the early stage of acute inflammation, it will not be necessary to mention all the remedies of acknowledged efficacy in common use. I shall consider mainly the use of bloodletting as being the most intimately connected with the question of debility, and because I believe this to be the remedy commonly mis-

applied. It would be desirable to discuss this part of the question on the broadest ground; it would be desirable to examine the treatment of every condition that may degenerate into the secondary typhoid, and especially those sudden invasions termed "venous congestions." The latter is indeed so intimately allied to the present subject that it seems almost necessarily involved. This discussion, from its importance, would necessarily occupy too much time at present, and we shall therefore continue to confine our remarks to simple, inflammation occurring in the ordinary manner, and openly developed. As already remarked, we shall say but little of any other remedy than bloodletting, because the misapplication of this is the main cause of the secondary aggravation of the disease. We have sufficient experience to speak confidently of this, for once we procrastinated bleeding, and then bled timidly, from fear of dreaded debility, as many still do; and however humbling the confession, truth compels the admission that we also occasionally lost patients from supposed debility, we cannot enforce this better, or illustrate the proper application of the remedy more satisfactorily, than by quoting from Cleghorn. Speaking of local inflammation associated with constitutional fever, he says, "he attempted to cure the patients by bleeding once or twice a day, except during the insidious remissions; but they generally terminated fatally." This led him to review the whole progress of the disease, when he determined "to use the lancet with more caution." The disease was still more fatal. He then became "convinced, that, instead of too much, too little blood had been taken away, in the beginning, and that he had been misled by the insidious intervals." He then began to bleed more plentifully, and his success was greater. He still felt that disease did not yield as it should do, and he then bled his patients in the horizontal posture "till the pains abated, or the patient began to faint." "If the symptoms continued a few hours afterwards, the same quantity was again taken away, without regarding the state of the blood, &c." He further adds, "it was remarkable how rapidly the sick recovered their usual health and strength, notwithstanding the great loss of blood they had sustained; while many who had been bled more sparingly, continued in a languid, infirm state for some months"* (*Cleghorn on the Epidemical Diseases of Minorca*, p. 164, 168). It also illustrates the truth of the remark hereafter quoted from Beddoes, that a patient will recover quicker from bleeding than disease. It also illustrates the principle of bleeding. It must be carried to relief, or syncope, and if the symptoms return, we are to repeat the remedy in the same way. If depletion is clearly required, it is required to produce a certain effect, and to stop short of that effect is to be influenced by most contracted notions, or a most unwarrantable timidity. Indeed we cannot too often enjoin that blood is drawn to arrest inflammation, and we are not to be governed by quantity or quality. Quality may be a modifiying circumstance in some cases, but it can never fix the limit of quantity. The pulse is often an invariable criterion, and it is equally often a delusive guide, that is, if taken by itself.† Syncope is said by some to be the limit of bleeding, but syncope *may* even occur before the inflamma-

* This also agrees with our own observation, for we daily see patients recover, with astonishing rapidity after the most extensive sanguineous evacuations.

† This is fully supported by the most experienced practitioners. We know, indeed, that the pulse may be weak, from oppression as well as debility, and that in this state it will rise in fulness and strength as the loss of blood removes the load.

tion is arrested; then the evidence of that inflammation again becomes manifest, as the system rallies; then, too, the remedy must be repeated as before; and I need scarcely refer, in defence of this, to the well established fact, that the employment of blood-letting is often the very means which enables the system to bear its further application; a fact that applies to every period of inflammation.

The *symptoms*, and not the period of the disease, must be our guide; indeed, as has been justly remarked: "The greater the disorganization, the greater our duty to give the sufferer his only remaining chance." Syncope, whether occurring after a small or large loss of blood, is not to prevent a repetition of the bleeding *as soon as the inflammatory symptoms return*, even if immediately. We cannot, therefore, agree with those who would make syncope the limit of sanguineous depletion. Neither can we agree with the directions of Hall, to place the patient in the erect position; because, if this is pursued, we frequently find that the patient will faint before the inflammation is subdued. There can be no doubt but that in many cases, the erect position is best, and the mere production of syncope will restore the equilibrium of the circulation, and relieve the vital or local oppression without losing much blood. But it is equally certain that, in other instances, the production of syncope is not sufficient, and we should rather guard against, than encourage this result. I would, therefore, determine the position according to circumstances, but if the local inflammation is severe, the result would probably be more favorable if we bleed in the supine position, guided by the symptoms, than if we bleed in the erect, guided by syncope. If a patient fainted during the first bleeding, while in the erect position, before the inflammation yielded, I should most certainly lay him down at the next bleeding. If we are guided by the effect of our remedy in *removing the disease*, we can scarely bleed too much in any position. And the physician, in this country at least, who follows implicitly the directions of Hall on this head, and is guided by the effects of his remedy on the system, will see Hall's state of "re-action" generated much oftener than if he is guided by the effects of his remedy on the *disease*.

The pernicious effect of blood-letting in severe visceral inflammations, when inadequately performed, is thus forcibly explained by Prof. Paine. The quotation is rather lengthy, but it is too graphic to omit. He says: "The vital forces are roused into greater energy, the whole circulation is released from its embarrassment in the capillary system; and the heart, being thus, and in other ways, set at liberty and invigorated in force, propels the blood with increasing violence. This mechanical impulse, in itself, lights up the flame of disease, and kindles it in other parts already disposed to join in the work of havoc. But much is also due to an augmented irritability of the instruments of action. The partial impression upon their vital forces takes off the depression from such as were not immediately concerned in the morbid process, and an exciting influence is reflected upon the immediate agents of disease, which, in their turn, had equally sustained, in a more direct manner, an exalted state of action. The remedy, therefore, in all grave visceral inflammations should be carried to the point of absolute depression. The forces of life are not only subdued in energy, but the strength of the impression alters the modified condition of such as carry on the disordered actions, and which constitutes the essential pathology of the disease." (*Med. and Phys. Comm.*, vol. ii., p. 313.) It can be scarcely necessary

to pursue this part of the treatment at greater length; it is a point that should be decided by facts, well authenticated, and not by the dreamy imaginings, or the bold conclusions of a speculative philosophy; and if the record of experience is to be our guide, enough has been recorded to convince the honest inquirer, that there are reasonable objections to the prevalent fear of producing debility; and this should at least, if still unconvinced, induce him to investigate the subject anew, with diligence and candor. Any one who will do this, can hardly fail to be convinced that the most successful practitioners in inflammatory diseases are those who treat them most promptly and vigorously; while such as Louis, and many of similar moderate views, judging even by their own numerical tables, are far less successful.

I may perhaps add, although it seems unnecessary to repeat the general principles so constantly inculcated in modern books, that other remedies than bleeding may be required. If the stomach is filled with indigestible food, an emetic will, of course, be required to remove it. The bowels should be moved early and thoroughly; and, if we use 15 or 20 grs. of calomel for this purpose, we will find it a valuable auxiliary to the bleeding. Oil may be required subsequently, or it may not. If, on the other hand, the stomach and bowels are in a healthy condition, a full dose of opium will, after *sufficient* depletion, exert the happiest effects. If the inflammation has progressed for several days without treatment, or with bad treatment, I would practise the same principle. Bleed until a decided impression was made on the *disease*, or syncope was induced—if fainting took place before the disease yielded, repeat the remedy. I would also repeat the calomel every four or six hours, until the disease gave way, or there was evidence that the inflamed parts were too seriously implicated to be immediately restored; if this was manifest, I would give the calomel in smaller doses, as a depurative and alterative remedy, without expecting immediate results, as in the first stage. Here, too, would be needed blisters and other acknowledged agencies, applied, of course, with a clear understanding of the influence intended to be exerted by their use, and under the well-known restrictions. The organ, or tissue inflamed, will, of course, modify the treatment and determine the drug to be selected. I pass, for a moment, to a few brief remarks on the use of antimony as an antiphlogistic.

In regard to the tartar emetic treatment of Rasori and his followers, we have no hesitation in adding our testimony of its frequent utility; yet it is the modification of this treatment, as followed more particularly by the English, which recommends itself to our attention, viz., bleeding as the main remedy, and tartar emetic as an adjuvant. But if we substitute antimony for bleeding, I believe we will fail much oftener than if we trust to bleeding alone, without the antimony. I come to this conclusion from a careful comparison of the mortality of this disease, as stated by the advocates of antimony, with my own experience and the experience of others, who rely mainly upon bleeding. And I believe most persons, who will examine this point with care, will find the advocates of thorough bleeding give a much lower bill of mortality than those who trust less to bleeding and more to other agencies. The authorities in favor of antimony are numerous and respectable, but authorities equally respectable and numerous, while admitting its sedative power, make many very proper exceptions to its use, and especially against relying upon it as the *curative* remedy. Dr. Osborne remarks that

"since what has been termed the tartar-emetic treatment has been introduced, and the practice of bleeding has consequently been to some degree discouraged, it appears to me that the advanced stages and fatal terminations of pneumonia have been frequent." (Dropsical Disease, p. 78.) Hourman and Dechambre have investigated with apparent care the relative effects of bleeding and tartar emetic in pneumonia, especially in the older patients at Salpétrière, and they speak strongly in favor of the former. (Archives Gén. de Med., 1837.) Armstrong, speaking of the antimonial treatment in the same disease, says, "the testimony is so complicated, that I can derive but little information from it; but upon the whole, the practice seems to have been unsuccessful." (Lectures on Acute and Chronic Diseases, Vol. I., p. 406.) It is very certain, to my mind, that bloodletting, if necessary in the progress of an inflammatory disease, will not be as well borne, neither will it produce as happy results, if tartar emetic has been previously administered to the extent recommended by Louis and others of the same school. We should also bear in mind that tartar emetic has other effects than as a mere anti-inflammatory; it has, aside from this, a local influence upon the stomach and bowels, and a peculiar influence upon the general system. Neither does the irritability of the stomach always yield, in this country, to the influence of increased doses, to that extent which has been observed by the more strenuous advocates of this practice in Europe. It is not to be inferred, however, from this, that we would insinuate a charge of incorrectness in the reported success of even the most successful. The difference may be explained by the supposition that dyspepsia—irritability of the stomach—a condition contra-indicating the use of antimony, is more prevalent here than elsewhere. It is certain that gastritis frequently springs up when tartar emetic is administered, as a primary curative remedy. Indeed, if we judge by the numerical tables of the most successful in the use of this article, we will be unable to discover any superiority over bleeding as used by others, or that acute inflammation has in their hands been rendered less fatal. If this be true, it is a false philosophy to abandon, or even to render of minor importance, a remedy so immediate in its application and so prompt in its operation as bleeding, for the slower and oftentimes inexpedient drug, which must of necessity very frequently exert a troublesome influence on the stomach and bowels. I would not condemn the proper use of tartar-emetic in acute inflammation, but I would most strenuously oppose substituting it for bloodletting; and I fully believe, if the lancet is used vigorously and to the proper extent, that antimony will rarely be needed. When the symptoms, we have mentioned as indicating this stage of the disease, are once developed, the objections which might be urged against making tartar-emetic the sheet-anchor early in the attack, now apply with increased force, and it is even doubtful whether the remedy can, in this state of things, be used to any considerable extent, even as an auxiliary. Its depressing influences may be exerted upon the vital powers to a much greater extent than its sedative effects on the local inflammation. The stomach and bowels will be exceedingly liable to become excited to an improper, and perhaps fatal degree. With this hasty notice of the remedy, which, from its extensive use, perhaps deserves more extended examination, we pass to the treatment we consider proper for the dreaded condition, debility.

It may seem to many like waste of time to argue the necessity of an

antiphlogistic principle of treatment in this stage of disease; but it is a well established fact, that many consider these symptoms as indicating a debility of the system, or perhaps a putrescent tendency, which is only to be removed by tonics and stimulants. This old, and as might be supposed, exploded idea, is encouraged by the influence of those who, while advocating a free use of the lancet, caution against carrying the remedy to excess (Hall), and urge economy in draining the vital fluid. (Wardrop, &c., Prac. Surg., p. 156.) This bugbear, debility, is still further magnified by the little reliance that many prominent writers place upon depletion even in the earlier stages of the most severe inflammations. We see that Louis has little or no confidence in the curative effects of bloodletting in Pneumonia, and many of his followers are equally lukewarm; Laennec, recommending the antimonial practice of Rasori, tells us, "he has sometimes effected very rapid cures of intense peripneumonies, without bleeding at all." (Diseases of the Chest, p. 255.) Now American practitioners, while they justly place the fullest confidence in the pathological researches of the French schools, profess to be guided more by their own observation than the theoretical deductions of men whose actual experience in treating disease is less valuable (in this country at least) than their own. Yet notwithstanding this, we are still influenced, and too often to a fatal extent, by their numerical fallacies. This extreme fear of weakening the strength and draining the vital fluid, also appears in the writings of some of the best British authorities. Dr. Graves says, "we can cure a pneumonic attack by moderate bleeding, and without injuriously weakening the strength of the patient. (London Med. & Surg. Jour., Vol. III., p. 103.) Dr. Stokes says, general bloodletting is not to be considered the chief means of removing the disease, and speaking of the typhoid form, he adds, "general bloodletting is to be used with extreme caution, and the vital forces are to be carefully supported." (Diseases of the Chest, p. 226, 31.)

Now, while I would strictly enjoin the most scrupulous husbandry of the vital forces, I would say, not that bloodletting should be used with extreme caution, but that it should be pushed to the farthest point compatible with the safety of the vital forces, *until the inflammation is subdued.* And this, after all, would be but a mere alteration of words, for I have no doubt that the *practice*, both of Dr. Graves and Stokes, and many others advising caution in bleeding, is as thorough as we could wish; but this idea of debility and the fear of losing the life's blood is so predominant that it really seems to modify the *written* practice, at least of some of the most energetic physicians, who thus unwittingly inspire their disciples with a fear of the very remedy they intend to urge by the strongest considerations. There are few writers who are not more or less open to censure on this point; for although their cautions in regard to extreme and unnecessary bleeding are not to be disregarded, yet, unless we use great care, they will be much more likely to weaken our judgment by exciting our *fears*, than to strengthen our decision by awakening a proper discrimination. We are told by one of the most distinguished writers of the present day (*Liston's Practical Surgery*, p. 156), that "every practitioner should think twice of the probable and possible effects, in every case of disease or injury, before he determines upon and proceeds to open a vein for the purpose of draining off the vital fluid." Now with all respect to the eminent surgeon quoted, I would urge a very different rule, viz.: that in every case of disease, and

especially where inflammation is suspected, the practitioner should think twice before he *refrains* from the use of the lancet. I fully believe the intentions of the authors quoted, and others who might be named, to be correct, but the fear of debility evidently operates, unconsciously to themselves perhaps, to such an extent as to induce them to urge a caution when they only wish to recommend the same care and discrimination that should be used in the application of every remedy. A moment's reflection will convince any one familiar with medical literature of the present day, that these remarks are merited; that, many prominent scientific writers very frequently express themselves in doubtful terms in regard to bloodletting, or urge cautions which have an undue interpretation, merely because the same cautions are not applied by the same authority, when speaking of other remedies, such as emetics, cathartics, &c., which, under similar circumstances, would, if improperly used, be productive of equal injury. Indeed, I believe these remedies (emetics and cathartics especially) will, as a general rule, produce more mischief, if misapplied, than bloodletting; and yet, we every day know of practitioners pouring down these drugs without mercy when there is evident though mild inflammation; and yet these same practitioners, while depleting the system by serous evacuations and irritating the stomach and bowels by violent remedies, would shrink from a moderate bleeding, as if the ghost of typhus stood before them and forbade its use. And here let us stop for a moment to inquire what class of physicians have most of this disease. It is precisely those who have most dread of it, and who constantly moderate their remedies from a false fear of inducing debility, whereas the physician who regards the disease, and not the remedy, as the cause of debility, rarely, if ever, meets with this termination.* There is another consideration which should induce the careful physician to hesitate about *abstaining* from bloodletting rather than to hesitate about *applying* it, and that is this: if it is not applicable he can judge of its effects before sufficient is lost to produce serious injury, he can proceed in the use of this precisely as he would in the use of stimulants; if it produces the desired effect, let it flow; if it produces the contrary effect, stop it. Let me not be understood as employing the effects of remedies as a means of diagnosis, but I do contend that if we would divest ourselves of that incubus, debility, and apply with rigor the same principles of practice to secondary typhoid that we do to other stages and conditions of disease, we will run but a small risk in using this test, in a case really admitting of doubt, compared with the risk incurred by omitting it.

We should not forget that it is the disease which induces debility; and the surest way to prevent the dreaded waste of vital power, is to remove the operating causes. The advice of Dr. Gallup, a man of large experience in this disease, as following continued fever, is most judicious. He says (*Institutes of Med.*, vol. ii., p. 182), "When the question is rather doubtful in relation to copious bleeding, it should still be practised, but in a reserved manner;" and by this he does not mean a timid and feeble manner, for he is now speaking of *copious* bleeding

* We may also urge, in this connection, that it is not the really feeble and debilitated who are most subject to the artificial typhoid,—it is the robust and vigorous; and moreover, when the victim of a true debility passes all its grades to a fatal result, do they exhibit the sordes-covered teeth, the dry brown tongue, and great muscular weakness, unaccompanied by a corresponding muscular emaciation?

and of the more advanced stages of the disease; and he further adds, that if it is well borne, it may be repeated, and probably to the point of relief and safety. This is advice founded on experience, and however much we may question Dr. Gallup's physiological views, no one will doubt his medical skill. It is mere child's play to direct our remedies to the future support of the system, under an attack of typhoid fever, when a judicious and vigorous treatment will prevent it. And it is equally childish, after the disease is developed, to devote our whole attention to support the system, and utterly neglect to subdue the disease which is now raging with increased virulence. And yet this is too common a practice in the profession. I would again remark, that cases may occur, in which general stimulants will be proper and necessary; but I would urge, in addition, that these very cases demand increased assiduity on the part of the physician, and unremitting and uncompromising efforts to subdue the local inflammation. This inflammation may be obscured—concealed as it were, by the severity of the general typhoid symptoms; it nevertheless exists, and continues its ravages as certainly and rapidly as if more openly developed. Indeed, it seems almost incredible how any one can be brought to forget so suddenly, the existence of an inflammation which has gone on unchecked for days, and must necessarily have produced more than transient effects on the organ or tissue inflamed; yet we constantly see disease treated for days, perhaps weeks, as an acute inflammation, and suddenly, within a few hours, perhaps, the whole treatment changed from an antiphlogistic to a stimulant course. The inflammation is forgotten, and debility has suddenly assumed a prominent position. The remarks of Southwood Smith, though applied to the intense forms of congestive fever, are applicable to the present point. He says (*Treatise on Fever*, p. 97), "I look upon the notion of debility to be an error not less palpable in its nature, than destructive in its consequences; and, if the havoc it produces does not confer upon it a preeminence as bad as that of the very disease of which it is supposed to constitute the essence, it at least entitles it, in comparison with every other error in medicine, to the distinction recognized in society between the hero and murderer. The one destroys a human being now and then; but the other numbers its victims by thousands." These remarks, though not strictly applicable as to the number of victims, are strictly true in spirit. And if the debility was really present—if the vital powers were either primarily or secondarily feeble, so feeble as to excite just fears of the result, even then there is not the shadow of a reason to neglect the local disease. It may be necessary to support the system at large, but it is imperatively necessary to subdue the inflammation, which will necessarily produce its effects with equal certainty in the feeble invalid as in the plethoric laborer. The extent of the remedy will of course vary, but the principle of its application will be precisely the same; for, an ounce or two taken by leeches from the former, will produce as potent effects, and be as true to the principle, as pounds taken from the arm of the latter. The advice of Dr. Elliotson is certainly authority of the highest order; and he tells us (*Principles and Practice of Medicine*, p. 130), that "when there is violent inflammation in a part, and little power in the system at large, it is not at all inconsistent to lessen the inflammation of the part by local evacuants and by cold; and yet to support the whole powers of the system by beef-tea, milk, and other nourishing articles of diet. The latter, *but not stimulants*,

are admissible." Dr. Elliotson is now speaking of a well marked atonic inflammation, and if his remarks are true of a naturally enfeebled condition, how much more will his directions for local depletions apply, when the system is weakened, not by general agencies, but by the disease! It will not be denied but that a state of debility, or rather irritability, resembling to a certain extent the condition we are now considering, is often developed during the progress of an inflammatory disease, but it is most confidently affirmed, that the careful practitioner will find no difficulty in distinguishing the one from the other. The history of the case, the progress of the disease, the pulse, and especially the local symptoms, furnish sufficient data to remove doubt. I fully believe, with all respect for the distinguished abilities and eminent talent of Dr. Hall, that his views of "irritation" and "excessive reaction," are exerting upon the reading physician, an influence the author never anticipated. "Excessive reaction from loss of blood," is, I fear, getting to be as serious a bugbear with many well educated physicians, as the monster debility is with the less informed.

I venerate the genius of Dr. Hall, and would pay the full tribute of praise to many of his writings, but I feel fully justified in directing especial care and caution in following too implicitly many of his deductions in regard to "excessive reaction," especially as conveyed in his "Researches on the Loss of Blood." There is no doubt, as before remarked, that such a condition does exist, and though much credit is due to Dr. Hall for explaining and promulgating this fact, yet if we examine carefully Mr. Hunter's work "On the Blood," we will see that all the same principles are there lucidly, and, as we think, more logically and usefully circulated. And yet Dr. Hall is an ardent advocate of bleeding. The state of affairs described so minutely by Dr. Hall, it is true, is so different from the secondary typhoid, that there is no danger of mistake in this respect, but the fear of producing this "excessive reaction" may deter from a proper use of the necessary remedy. If the physician has constantly the fear of Hall's irritability before his eyes, it will be but the ghost of Brown in a more specious garb, and exercise the same unhappy tendency. There must be no fear of irritability or debility, operating to modify the application of a *curative* remedy. There must, in fact, be no fear in the matter—the remedies are applied in a scientific manner to obtain a specific result, and this result must be obtained. But if there be any fear justifiable, it is a fear lest we stop short of cure. I can scarcely imagine the case of a prudent physician carrying his remedies beyond a cure. But, even if bloodletting should be liable to induce debility, we have high authority for asserting, that in these cases (acute inflammations) the "constitution recovers more kindly from debility by bloodletting, than by disease." (*Beddoes' Researches on Fever and Inflammation*, p. 97.) But is debility a state of danger after the local disease is removed? Certainly not. It is the debility induced by protracted, *half-cured*, or uncured disease, which is alarming. It is probable, therefore, as before intimated, that the errors in practice arise mainly from mistaking this for a state of true debility, when a careful analysis of the symptoms, especially if taken in connection with the history of the case, would do much to reconcile all discrepancies.

The best modern authorities advocate depletion to remove local inflammation, even where there is previously existing a pure typhous state of the system. If this course, then, is authorized when the powers

of life are depressed by contagion or miasma, how much more is the same course demanded, when the recuperative energies are failing, not before a general depressing influenza, but the temporary influence of previous inflammation; an inflammation, which is still progressive in its course, and has now affected the whole system by its severity? And yet at this very point, when all would seem clear and plain, many appear to think, and really act, as if the previous inflammation had disappeared, and the implicated organs had resumed their healthful action, and they, instead of being called upon to combat an active disease, are required to administer to an entirely different affair,—a state of pure debility. The previous inflammation is apparently forgotten, antiphlogistic measures abandoned, and bark and wine too often given, without weight or measure. The symptoms are usually aggravated, the dose increased, and the patient dies,—killed, as I believe, by an improper treatment, founded upon false theory. This error is less common here than in Europe, but is sufficiently prevalent here to need a voice of warning often repeated in our ears.

It is too common for practitioners to cease all efforts to cure the primary inflammation, the moment typhoid symptoms supervene; they then prescribe for the secondary symptoms alone, as if there was nothing more to remedy than a state of idiopathic debility. This constantly occurs, not when the character of the disease is doubtful, as it often is in epidemics, but when it has begun as a pure inflammation, and progressed as a pure inflammation, until, by deteriorating the blood, depraving the secretions, and arousing all the sympathies of the system, and thus undermining the recuperative efforts of nature, the typhoid symptoms follow as a secondary effect in so regular a train, that it seems inexplicable how the notion of debility could have become so prevalent, and the subsequent so constantly mistaken for the antecedent. A simple phlegmasia admits of an argument, whether the general state of fever causes the local disease, or whether the local affection developes the fever. The general and local symptoms may occur simultaneously, or in such intimate connection as to admit of an argument on either side; but in the case before us there is no such doubt. The evidences of the so called debility are so manifestly and uniformly secondary to the symptoms of inflammation, that it would seem impossible to confound them. But even if typhoid and real typhoid influences are manifest, it would add nothing to the objections against combating the local disease by antiphlogistics, neither does it add to the argument for the use of stimulants. Acute inflammation, such as we have supposed to exist, whether occurring in the robust or feeble, o reven amid infection, requires to be treated upon precisely the same principles, viz.: antiphlogistics. We modify the remedies so as to adapt them to these various circumstances, but adhere with absolute strictness to the general principle, and from this the consistent practitioner can never depart. He may, perhaps, in certain cases, be justified in giving remedies calculated to sustain the general system, while he is curing the local disease; but the moment he neglects the previous inflammation, and suffers his *whole* attention to be occupied by the secondary symptoms arising from that inflammation, he is departing from the true principles of practice, and losing his best chances of cure. Our only rational plan, therefore, is to subdue the inflammation, correct the secretions, repair, if possible, the destruction, and, if necessary, sustain the vital energies. This latter

will be best accomplished by proper nourishment, and for most persons milk and water is the best; this, however, must be regulated by circumstances, such as the condition of the stomach, and few direct stimulants will be necessary. If the previous views are correct, the instances requiring stimulants will be rare; and if the inflammation has actually progressed, until the vital energies are not only oppressed, but to a certain extent destroyed, the prognosis must be doubtful, and if the disease has been tampered with in the beginning, it will almost necessarily prove fatal. Still, even here, we must not give up in despair a judicious depurative and sustaining course will sometimes rescue the patient, as it were, from the grave.

In all cases of doubt, and, indeed, we might say in all cases, particular attention should be bestowed upon the actual condition of the heart; we are not to be satisfied with a weak beat of the radial artery, but examine accurately the heart itself, and if there is diminished impulse, and feebleness or extinction of the first sound, we have, according to Dr. Stokes, a safe criterion for the administration of stimulants. His views on this subject are explained at length in the *Dublin Journal of Medic l Science*, for March, 1839. Valuable as this guide is, there are many who cannot avail themselves of it; and we subjoin the following experimentary rules from Dr. Armstrong, in regard to the use of wine in typhoid fever.

1. If the tongue becomes more dry and baked, it generally does harm; if it becomes moist, it generally does good.

2. If the pulse becomes quicker, it does harm; if it be rendered slower, it does good.

3. If the skin becomes hot and parched, it does harm; if it become more comfortably moist, it does good.

4. If the breathing become more hurried, it does harm; if it become more deep and strong, it does good.

5. If the patient become more and more restless, it does harm; if he become more and more tranquil, it does good. In all cases the quantity should be small at first, until we see what effects it will produce. Quinia, or other articles, may also be required, but it would exceed our limits to enter into particulars which must be well known to all. External stimulants may also be required, and would, of course, be used with the usual restrictions.

We close this part of our remarks in the language of the veteran Dewees; and we do this with the more pleasure, because we have great confidence in his truth and veracity, and think his opinions generally founded upon a careful experience and a close observation of nature. If he was not as deeply versed as some modern book-makers in the mysteries of closet speculation and physiological experiment, he was better informed in many matters of practical utility; enough so, at least, to give his experience an influence more lasting than their theoretical inferences. He says: "Our experience is decidedly against this mode of practice (the stimulant); for we have not unfrequently, when called upon to prescribe for this artificial disease, witnessed that it would yield, with pretty constant certainty, to the antiphlogistic and temporising plan of treatment. We have often abstracted blood, both from the general system as well as topically, when all the symptoms enumerated, and which are supposed to constitute typhus, were present; and we have witnessed them to change their aspects immediately. For

by these means we have had the dry, dark tongue changed to a moist, whitish one; for the dry, hot skin, we have had a cool, moist one; for the flushed face, we have had a pale one; delirium has been arrested; the irritated pulse has been converted into one of a mild and open character." We may also add the judgment of Tweedie. Speaking of this condition, he says: "Notwithstanding apparent prostration, and a dry, brown coating on the tongue, I have seen a few ounces of blood from the arm of very great benefit. Stimulants, under such circumstances, are always injurious, and generally render the situation of the patient quite hopeless." Our remarks have, thus far, been confined, for the most part, to the one remedy, bloodletting. We did this, not to defend a single remedy, but because this remedy afforded the best illustration of a principle; and it is because we are contending for principles and not rules, that we have said little about the extent and mode of employing this and other proper means of cure. It will be borne in mind that the vital powers are more or less prostrated, and in some cases perhaps debilitated. In this condition we cannot expect to remove the disease and perfect the cure *instanter;* we cannot expect to cure by producing a powerful and sudden shock on the system; neither can we expect the system to sustain the same shock, as it readily rallied from an earlier period. The important point is, to remember that there is a local inflammation which *must be subdued.* If the powers of life are so depressed as not to admit this result, the case must necessarily be fatal. We can do much to sustain the vital powers, and by judiciously combining general remedies to nourish and sustain the system with local or general depletion as the case may require, often succeed in saving cases of great danger. The bowels should of course be kept soluble, and moderate doses of calomel answer this purpose admirably; perhaps a dose of oil may now and then be added with advantage. If there is well marked nervous irritability it may be allayed by opium, hyosciamus, stramonium, or what is often better than either, prussic acid. In a word, I would practise a modification of precisely the same principles contended for in the earlier stage of acute inflammation. It will also be remembered that the secretions are now become morbid, and, in their turn, act as new causes of excitement; especial care should, therefore, be had to restoring the function of every organ, and the healthy condition of every secretion. If these principles are properly applied, the conscientious physician will often enjoy the gratification of having saved a life, which, but for him, would have been cut short.

ART. VIII.—*Excision of a portion of the Tendons of the Peronei Muscles in both legs.* By LAWRENCE PROUDFOOT, M.D.

CASE.—A. E. D., aged eleven years, of delicate constitution and strumous diathesis, has been the subject of neuralgic pains in the lower extremities, for about three years. Occasionally the pains extended from the shoulders to the wrists, with loss of muscular power in the arms and hands, so as to disable her from using her needle; constriction and pain encircling the waist, and extending from the loins across the lower part of

the abdomen, with paralysis of the bowels and bladder. Similar muscular debility of the lower extremities, with violent pains darting down the legs, along the anterior surface of the tibia, and extreme soreness on touching the skin, and wholly unable to bear the least weight upon her feet. The tendo Achillis of both legs was rigidly contracted, and the toes drawn into a state of flexion, which she is unable to control, on account of the paralysis of the peronei muscles.

The whole length of the spine was tender on pressure, but more particularly painful over the dorsal vertebra, with a double lateral curvature.

I will not give a detailed account of the treatment. A recumbent posture was maintained about three months, and setons, caustic issues, cupping, and blisters were applied, along the course of the spine, with the internal use of the protiodide of iron, under which treatment she progressively improved.

At the end of her confinement to the couch, an instrument made by Dr. Knight (Museum Buildings in Ann street) was worn, which gave great support to her body and limbs, and enabled her gradually to take a few steps, and eventually to walk pretty well, but she could not take a step without it. The constant use of this support, however, became exceedingly irksome, from its weight and confinement of her motions, and as her general health had greatly improved, and no benefit had been derived from the free use of strychnine, and other remedial means, made use of to restore the paralysed muscles, I determined to resort to Tenotomy.

On the 17th of June, I divided the tendo Achillis of both legs, which enabled me to bring down the heels about two inches; and on the 9th of July, with the assistance of my preceptor and friend, Dr. Valentine Mott, and Dr. Wm. H. Van Buren and Dr. Isaacs, I excised a portion of the tendons of the peroneus longus and brevis muscles, with perfect success. The steps of the operation may here be detailed, as I believe this is the first instance in which the exsection of the tendons of these muscles in both feet has been performed.

I commenced the operation by making an incision two inches in length, behind the external malleolus, the lower extremity of the tibia being opposite to the middle of the wound; the tendon of the peroneus longus was immediately exposed, and below it lay the tendon of the peroneus brevis, both being perfectly relaxed. I then elevated them with a probe, and with a curved bistoury, divided both tendons at once, at the middle of the incision. There was not the least retraction of the peroneus brevis muscle, although some of its fibres were necessarily cut, in dividing its tendon at this place. I then took hold of the lower portion of the tendons with the fingers, and removed about half an inch of each.

The operation was the same in both feet.

The wounds were drawn together with adhesive straps, and a long, wide strip was applied from the base of the metatarsal bone of the great toe (at the insertion of the tendon of the peroneus longus) crossing the sole of the foot, and extending up the leg, in the course of the muscle, to supply the place of the divided tendons, the ends of which were by this means approximated, and with the bandage, maintained them in contact. In ten days the wounds had perfectly healed, and at the end of three weeks, she could extend the feet, and walk without any assistance.

New York, August 10, 1846.

ART. IX.—*Remarks on Masked Intermittent.* By H. P. DEWEES, M. D., of New York.

IN June, 1845, a female patient called upon me, accompanied by a young lady of about 18 years of age, who was desirous for advice on account of continued suppression of the menses. Several months previous to this, she had spoken to me concerning her young friend, representing her to have had a sudden check to her periods, attended by cough. Upon inquiry as to her having had fever and ague, I was at the time informed that her ill health dated from the period of its sudden cessation.

The patient was rather above the middle height, thin and debilitated. The voice was husky and wheezing, interrupted at every effort to speak by coughing. She had had a slight hemorrhage several times, attended with comparative relief for a short interval. At length night sweats, loss of appetite, and fits of severe oppression rendered life a burden. The sickly pallor of her countenance bespoke the poverty of the blood; the tongue was blanched and pasty, with red tip and brownish fur over the base. For several weeks her voice had failed, and (as she observed) "she had several times coughed up something hard." The menses had not appeared for six months, and although the expectoration was phthisical, and the pulse over 100, yet she laughed at the idea of her lungs being affected, the suppression being her only care.

On percussion there was marked dullness over the upper portion of the right lung, and auscultation revealed a large cavity in its apex, pectoriloquy, and cavernous respiration being perfectly distinct; the left lung was apparently sound or but slightly affected.

The case presented itself in this light: here is a female having cavities with circumscribed tubercular deposit, accompanied by emaciation, incessant cough, puriform expectoration, loss of voice, appetite and rest, night sweats and other attendant symptoms of phthisis; that her health had been good until attacked with intermittent fever, the menses diminishing, and finally stopping upon the sudden cessation of the disease. Shortly after, pain under the left mamma is experienced, with alternations of costiveness and diarrhœa, the strength gradually failing with increasing impoverishment of the blood, cough now setting in, attended with purulent expectoration, hemorrhage, and other symptoms of consumption, the pulse becoming quick and frequent, marking the general irritability.

Having met with cases of tubercular diseases of the lungs and intestines, originating subsequently to an attack of intermittent fever, which had been arrested suddenly, either by treatment or without it, the health becoming impaired, I was induced to attribute the situation of the patient to this cause. As far as my experience goes, the splenic region is first complained of, owing to the pain; the uterine functions evidencing their disturbance shortly after, the flow becoming lessened or ceasing altogether. As far as symptoms are concerned, the lungs enter last in the general disorder, unless the patient be scrofulous or syphilitic, when the tubercular degeneration ensues more rapidly in them, or in the intestines, according to the seat. But if the patient be neither strumous nor syphilitic, the tuberculosis takes place later and in sequence to other constitutional changes, by which the assimilating powers in general are weakened, the blood evidencing the alteration in its composition, by the blanching of the cheeks, tongue and gums.

The *treatment* indicated in this, and in all other like cases, was to improve, as far as possible, the quality of the circulating fluids by tonics and proper regimen, conjoined with remedies known to have influence over the organs first exhibiting the deviation from health; the pulmonary symptoms to be treated as they arose. She was put upon mass. ex hydrarg. with extracts of hyosciamus and taraxacum as a cholitic. The infusion prun. virg., conjoined with small doses of hydriod. potass. three times a day, as a tonic and alterative, the effect of the bark being also invoked to quell the irritability of the heart's action. As the cough was troublesome she was ordered the following mixture:

℞ Syr. Ipecac. ʒ j.; Tart. Ant. et Pot. gr. j.
" Scillæ ʒ ij.; Morph. Sulph. gr. ij.
" Tolutan. ʒj.; Aq. Font. q. s. f. ʒ viij. M.

A tea spoonful three times a day. The whole body to be sponged twice a day with a strong solution of salt and tannin in whiskey; the chest to be constantly covered with a cloth wetted with the same. When the night sweats came on, to be sponged with warm spirits and water, and rubbed till dry; the diet to be bland and nutritious, with meat free from fat once a day.

In the course of a few days she returned, feeling somewhat better, the nights being passed more comfortably. Her bowels had been freely opened, passing tarry discharges. Ordered to continue same course, omitting the mercurial, the addition of wine whey being made to her diet, with small pieces of ice to allay the thirst.

About five days after this I again saw her; she was looking better, and said that the sweats did not trouble her so much; that the cough was easier, and that she felt stronger. She was then ordered a vomit of ipecac, and on the following day to take quinine in 3 gr. doses, three times a day. As she complained of my "not attending to her courses," I desired her to be at my office the day following the operation of the emetic, in order to have a galvanic current passed through the pelvis.

In the treatment of simple menstrual suppressions, it is my practice to adhere to as strict a calculation as possible, as to the probable period for the re-appearance of the catamenial nisus, the usual intermission being gained from the patient in order that the uterine functions should be invoked at the *natural* time. By this plan the patient is not uselessly punished by the long continuation of those remedies viewed as emmenagogue, or having a direct action upon the uterus. Generally, the period will be found to be about four weeks between the disappearance of the discharge and its return. Calculating the number of days intervening from the stoppage to the time present, and dividing by the number of days occupied by the intermission and discharge, a tolerably correct result can be obtained for the *should-be* appearance, had the flow continued as in health. The *direct* treatment should not be entered into earlier than 8 or 5 days before the calculated return, nor continued over two or three days after the period, the restoration of the blood and muscular strength by suitable remedial hygienic being only called for. By this plan much useless dosing is saved, besides being more successful, as far as my experience goes.

In the case under consideration, the menses had not appeared for six months; about eight days previous to the calculated return, the galvanic current was applied. Six batteries were begun with, the positive pole being placed over the sacral portion of the spine, whilst the

negative having a sponge attached was rubbed freely over the uterine region of the abdomen. Each successive day one battery was added, until the series amounted to twelve. On the third application, fulness about the loins and slight bearing down pains were experienced. At this time a current from three batteries was passed through the right lung, the positive pole being placed over the cervical portion of the spine. On the fifth day she was ordered to bathe to the knees in mustard and cayenne water, and on being rubbed dry, to wear a pair of woollen stockings sprinkled on the inside with red pepper, a small mustard poultice being placed above the inner condyles of the knee joint, and a warm bran poultice to be kept over the abdomen—to continue doing the same for three nights.

I may here remark, that in many uterine diseases, pain about the knee joint will be frequently complained of, a sympathy seemingly existing between the organ and this portion of the leg; and I have known patients tortured with blisters, setons, &c., over and near to the joint, under the idea of the part being seriously affected, when by attention to the womb it was speedily relieved.

The seventh night after the application of the batteries, she passed from the vagina, with much bearing down pain, something which she described as "like a piece of sponge with streaks of blood through it." Upon further inquiry, I concluded it to have been of fibrinous formation. The next night, after the eighth application, black thick blood was voided *from the rectum*, continuing irregularly for three days, accompanied by the usual sensations of menstruation, and with feelings of general relief. This I considered to be vicarious to the catamenia. The applications to the chest were only four, and whether from this cause or others, the percussion was less dull; the congestion being considerably relieved, whilst the expectoration became more bronchitic, the night-sweats having almost disappeared. Shortly after this, she left for the country, a marked amelioration having taken place. She returned several weeks after this, and sailed for the South without my again seeing her.

The points offered in this case are somewhat interesting, as regards certain pathological conditions. The first is, that intermittent fever, or its exciting cause, may exhibit itself after the stoppage of the regular exacerbations, in the disorder of an organ or organs, which previous to the attack, or even during its continuance, had been performing their healthful functions, the blood suffering in its corpuscular aggregation, inducing in some a chlorotic condition, without detriment to its fibrin: or, again, in others of true scrofulous constitution, defibrinating the blood still more, tubercular formations in the lungs or intestines being developed. Whilst in a third set, the nutritive functions of every organ may become so impaired, that during life no localization of any particular disease can be determined, the decay of all seeming to waste existence away. During this influence the peculiar constitutional taints, or diatheses, are likely to become developed, whether scrofulous, arthritic, neuralgic, or rheumatic—the unwelcome visitor, when so suddenly departing, ushering in a guest more to be dreaded.

These cases are most frequently to be found amongst females, a chlorotic condition first exhibiting the objective changes, attended by pain under the left mammary region, with irregular chilly sensations, the lungs frequently masking the true nature of the disorder, by cough and expectoration of viscid mucus or puriform sputa, the result of too

much labor in their functions: the liver, in nine cases out of ten, not performing its office in assisting to decarbonize the blood, owing to torpor or obstruction in its circulation. A similar condition is to be observed in males; and as far as my observation goes, it is mostly found in those exposed to southern miasmata, complete chlorosis ensuing.

The lungs, in many of these cases, will be found free from severe organic lesion (unless long neglected); and it is in these very cases that the vaunted cures of tubercular phthisis take place. If tubercle does become deposited, it is generally in isolated masses; and when its dislodgment by softening ensues, the lung may return to comparative health, the cavities healing as in an ulcer, their walls being lined by their peculiar cellulo-serous or fibrous membrane, provided the nutritive functions have been at the same time improved. And the treatment found successful in these cases records the fact, that the lungs were not the seat of that formidable disease, known as scrofulous phthisis, which apparently is and ever will be incurable, as regards specific treatment, until more accurate knowledge of the blood can be obtained, with some surer means for its improvement.

In these cases there is little or no hemorrhage, the fibrin remaining intact, or, indeed, on the increase, provided inflammatory action ensue; the red corpuscles alone becoming reduced; and when hemorrhage does happen, it is mostly attended with relief, unless it be in excess. The liver becomes tumid, and by its upward pressure and weight, causes pain in the right chest, with an uneasy sensation in breathing, or in the scapular region, owing to the nervous connections. The spine is tender on pressure, or lancinating pains are experienced, leading from the column to the part affected. The action of the heart becomes abnormally increased, and pressure over the cervico-dorsal vertebræ betrays spinal irritability associated with it. The later views of the disordered condition of the spine in intermittent fever seem corroborative of the doctrine of functional disturbances originating from its irritation: and the reverse—that spinal derangement may ensue consequential to disease of an organ or organs whose nerves pass into it.

As above observed, the sympathetic affection may completely mask the original disease, and the treatment fails on account of the erroneous diagnosis, the latent disorder not being discovered. The liver and the lungs are in part analogous in their action, viz: that of decarbonizing the blood: and when from obstruction and nervous depreciation, &c., the former becomes unable to perform its part, the lungs have double duty to do; and hence they become, if correctly regarded, a valuable source of diagnosis in many cases, though greatly at their expense. The respiration will be found bronchial and puerile in the small tubes of the left lung, and upper portion of the right, the lower parts varying according to the encroachment from the enlargement of the liver.

To say that a person, having disease of the liver, lungs, or of any other viscus, must previously have had intermittent fever; or, that because he is chilly at one time and hot at another, the type of the disorder is intermittent in a masked form, would be assuming too much; but when the individual has had the ague, which has suddenly ceased, or has been exposed to malaria without regular exacerbation exhibiting itself, and functional disturbances of an organ or organs manifest themselves, in which periodicity is seemingly marked, then it does become a matter of importance, because of the treatment requisite, as anti-periodic

tonic remedies, with other adjuvants towards building up the blood and invigorating the nervous tone, must be entered into, in conjunction with those addressed to the local condition. And the treatment found successful in these cases bears out the truth of the proposition.

We may therefore lay it down as a law, that the cause producing the phenomena of intermittent fever, may not, in certain constitutions, exhibit itself so as to induce the regular exacerbations of chill and fever, but may create disturbance of any organ or organs supplied with nerves from the spinal or ganglionic system, giving rise to various secretory disorders, or by action on the spinal marrow itself, may originate the different forms of paralysis consequent on its implication.

When the liver becomes affected, congestion of the portal circulation ensuing, the due elimination of the principles of the bile from the circulating fluids does not take place, and the contents of the head, chest, and abdomen, become seriously implicated; so that, in conjunction with enteric disease (sometimes accompanied with ascites, jaundice, &c.), the whole nervous system evidences in its Protean disorders, the effects of the retained poison.

The deposition of tubercles in the lungs takes place, either as a result of the mal-condition of the assimilating processes, by which the nutritive fluids are prepared ready for the use of the economy; or, by reason of the low organizable power of the tissues themselves, bathed, as it were, by the nutrient materials, the fibrinous and albuminous parts being alike rejected. Again, they may be developed by some local cause, in which inflammatory action is present, hepatisation taking place with transudation of plastic lymph and albuminous deposit; the tubercular formation resulting on the decline of the activity of the inflammation, by the absorption of the fibrinous elements, the less assimilable matter remaining. In this form, if there be no scrofulous dyscrasia, and the general reproductive powers are not too greatly injured, the ejectment of the tubercle relieves the embarrassed state of the lungs, and the patient may recover without great loss of their substance. But if there be a latent strumous diathesis, the decay of the lungs may ensue as in open scrofulous phthisis, from its speedy development, the blood and the reproductive powers of the parts themselves suffering in their vitality.

In the *truly scrofulous* subject, when the lungs become affected, the deposit of tubercle takes place without the above processes, for the blood is already impoverished in its fibrin (as well as in its red corpuscles), and the tissues are weakened in their molecular attraction, so that the deposition of albuminous material, and the waste of the lung by ulcerative action, go on *pari passu*. Phthisis, then, cannot be said always to result from a scrofulous taint, any more than the lungs becoming so affected, produce scrofula; for what is proved of one can be so of the other.

But the result as regards life is different, for in the true scrofulous dyscrasia, consumption must ever be an incurable disease, as far as our present specific remedial knowledge goes: whilst in the other—or where, through pulmonic or other visceral derangements, the blood is thrown into that state representative of struma from some known exciting cause, the prognosis is more favorable, as the causes of the degeneration frequently tend towards self-removal, and by judicious treatment the health can be renewed, though with a hampered state of the lungs.

As regards the presence of real inflammation, I conceive it is never to

be found in the pulmonary tuberculosis of true scrofula (unless engrafted on accidental pneumonia or other inflammatory origin), the fibrin being always of low quantity. But it may—or rather its accompanying changes—be found in the *induced* scrofulous state, the inflammation being the *precursor* and not the successor. And hence has arisen the difference in the analyses of the blood in phthisis, sufficient discrimination not being used in distinguishing the cases.

Whilst in those cases called "galloping consumption," it seems to be always more or less present, the lungs, in some, appearing to undergo inflammatory softening from the commencement to the end, without the formation of hard tubercle, a (so to call) pulmonary phagedena ensuing. In others, the lungs become beset with an immense crop of miliary tubercles, proving fatal from their mechanical obstruction, suppuration attending only towards the close of life, the expectoration previously being sparse, or merely bronchitic, and hence frequently mistaken for pneumonia, or simple bronchitis. And these may be present—the former forming a rapidly fatal complication (being most frequently induced by incautious exposure) with hemorrhage or puriform expectoration, accompanied with the usual signs of cavities only towards the end of life. The question of the organization of tubercle appears insupportable on the slender grounds advanced by its advocates. The evidence of vessels and fibrous threads in their substance offers no proof in their favor, as they may merely be, either the remnants of the incarcerated web of the lung itself, the vessels, &c., being first rendered impermeable by the encroachment on their walls by the militant growth, and by the abnormal quantity of blood thrown on the surrounding tissues, thereby reducing their integrity; or, if the tubercular deposition originally contained fibrin, the disposition of this element to become organized whilst in contact with a living membrane, accounts for the appearance when examined. But these are the *results* of previous inflammatory action in the parts affected, and not the *consequential* formations of ordinary tubercle in scrofulous subjects.

The uterine suspension in the case referred to offers matter for interesting remark. The function of the organ had not been performed for several months, and when stimulated from its lethargy by electrical influence, a fibrinous mould is apparently thrown off, accompanied by a discharge of blood from the rectum. It would appear that this intermission of uterine performance was preservative, inasmuch as the blood was already reduced in its red composition, the uterus not being duly stimulated to its periodic performance by reason of this degeneration, a mere transudation of lymphy material being thrown out, sheathing the internal parietes. Hence we see a beautiful law of nature established. The discharge of effete blood from the rectum, by which the hemorrhoidal vessels were emptied, and thus made to act on the liver, affords a useful hint for remedial application in similar cases, due attention being paid by every possible means towards improving the quality of the blood and nervous power.

From previous experience I was induced to apply the uninterupted galvanic current through the pelvis, having established the catamenial returns by its influence in other cases, and especially in those depending, as it were, on uterine paralysis. It was the first application I had ever made with it in phthisis, although I had frequently experienced benefit from it in those cases of congestion caused by debility of the capilla-

ries, from loss of nervous tone, the nutritive functions being at the same time rendered more active. It remains for future experiment over similar states, to say, of what real avail it might prove in tubercular cases. I am inclined to think, from attentive investigation of its action, it would be found, in judicious hands, of great benefit. Like the administration of any other remedy it requires experience, and this can only be gained by patient and repeated trial; the diagnosis of the state of the parts to be operated on being carefully made, and when made, to understand what *curative actions are necessary;* and how best to produce them. The form of the battery also requires attention, as well as the size of the plates, and the quantity and intensity required. In my own practice I use the continued current, as far more satisfactory in its results, resorting but seldom to the machines so multipled by the ingenuity of their contrivers, reserving the employment of these to certain cases, the electricity, and not the shock, being the remedial agent.

New York, September 30th, 1846.

ART. X.—*Extracts from the Recorded Proceedings of the New York Medical and Surgical Society.*

DR. BEADLE reported a case of *abortion.* The lady met with a slight accident at the third month of gestation, at which time there were present the usual symptoms of abortion. The same subsided, as also did all the signs of pregnancy. The fœtus, however, was retained in utero, and was not expelled until the 7th month, when it was only the size of a three-months' fœtus. The same was exhibited to the Society.

Dr. A. C. POST mentioned a remarkable case of strangulated hernia, of many years' standing, in a black man. He had never used a truss, but usually supported it with the hand. The hernia came down after violent exertion on horseback. He was unable to reduce it, and was shortly after taken to the hospital, where the usual remedies to effect *a taxis* were resorted to, and continued for more than an hour, without effecting a reduction. Dr. Cheesman then proceeded to liberate the stricture. The sac was much thickened, and contained many feet of both small and large intestines—a portion of intestine was found discolored; a large portion of *mesentery* was also contained in the sac, and could not be returned before a liberation of the stricture, to the extent of one inch in the integuments and abdominal muscles.

Dr. SWETT reported the case of an elderly gentleman, aged 70 years, with disease of the heart, and effusion in the cavity of the chest and pericardium. He was subject to violent paroxysms of difficulty of breathing, which continued half an hour or more, which had been regarded as nervous and dependent on gastric irritation. On examination he (Dr. S.) found no cough; pulse frequent, and feeble; had been subject to palpitation of heart for a year or more. There was, at the time, slight œdema of the feet. He could lie upon the sound side, while in another somewhat similar case, related by Dr. S., the patient could not do this.

Dr. MCCREADY reported the case of a gentleman with organic disease of the heart, and its concomitant symptoms, terminating in apoplexy, paralysis, with loss of speech, &c.

MEETING, Nov. 1, 1845.

Dr. BEADLE reported an instance of a retention of the placenta for five days, during which time the patient remained comfortable and free from pain. The uterus was so high up that the *os tincæ* could not be felt. *Ergot* was administered, and continued 24 hours. At the second visit, on examination, a tumor was felt, which, at the time, was supposed to have been an ovarian tumor, but after the expulsion of the placenta, which had been detached, the tumor disappeared.

Dr. H. GREEN mentioned having recently made application of the *nitrate of silver* to the mucous membrane of the larynx, in a hopeless case of croup, during the stage of collapse. Every remedy had been tried, and failed to afford relief. Three applications had been made during 12 hours, producing very little irritation, and with decided relief to the breathing. Adherent mucus had been thrown off after the second and third application. During this time, calomel one grain, with half a gr. of ipecac, had been administered every three hours. The case terminated fatally. No autopsy. Dr. G. related the case to show that the child had been benefited by the treatment, and suggested that it might be found efficacious in similar cases. At a subsequent meeting, Dr. G. read the following paper, "*On the Effect of the Nitrate of Silver* upon certain conditions of the mucous membrane, when topically applied.—(See N. York Med. Report., No. 25, pp. 389–90–91.)

So certain and so salutary are the effects of the nitrate of silver upon the mucous membrane, and its cryptæ, when affected by chronic inflammation, that I have long since considered the local employment of this remedy a specific in diseases of this character and location. Of its effect in acute inflammation of the mucous and sub-mucous tissues, when locally employed, less is known. Having used it in several cases of acute uvulitis, where its free application in a concentrated solution to the uvula, velum, and whole faucial structure, arrested at once the inflammatory action, I ventured, a short time since, to resort to this remedy in treating a disease, which has been remarkable, hitherto, for not yielding, in a large proportion of cases, to any plan of treatment employed.

Mrs. B., a lady of rather a delicate constitution, who had been hoarse from a cold for several days, rode out from the city a few miles, on the afternoon of Friday, the 11th of June, of the present year.

The day had been warm, but on returning to the city towards evening, the weather had become cooler, and the carriage being open, she faced a current of air all the way home.

Some slight chills occurred during the evening, which being followed by a restless night, led her to suppose she had added to her cold; and hoping these symptoms would soon subside, she delayed through the following day to call for medical aid. Her hoarseness the next morning was greatly increased; slight chills were again felt, and in the course of the day, pain and a sense of constriction about the larynx came on, attended by a dry, severe cough, and great difficulty of respiration.

I was called to see her late on the evening of the 12th of June, the next evening after her exposure, and found her laboring under strongly developed symptoms of acute laryngitis. She was sitting upright in bed, breathing with great difficulty, and uttering at every inspiration a croupal sound, which was followed by a short convulsive cough. The face was flushed, the pulse frequent and full; and she complained constantly of a

sense of suffocation, and of great distress in the laryngeal region. On inspecting the throat, the fauces and the pharyngeal membrane, as far down as it could be seen, presented the appearance of a high degree of inflammation.

As soon as it could be prepared, an emetic of tart. ant. with ipecac. was administered, a vein in her arm was opened, and about twenty ounces of blood withdrawn.

The emetic operated freely, and although the pulse was reduced, and the patient experienced some degree of faintness after the bleeding and emesis, yet the labored breathing, the cough, and other distressing symptoms, remained nearly the same. A mustard cataplasm was now applied to the upper part of the sternum, and another between the shoulders. Small doses of antimony were given every fifteen or twenty minutes; and after remaining with her until two or three o'clock in the morning, I left her to obtain other means of relief.

On returning an hour or two afterwards, I found but little alteration; the oppressed respiration, the stridulous cough, and the distress in the throat, remained about the same. She had vomited several times during my absence, but had obtained no rest.

I had now brought with me the means of cauterizing the throat, and was determined to delay its employment no longer. Indeed, had I had the means with me at first, I should not have left the bedside of the patient without employing this invaluable local remedy. With a solution of the crystals of the nitrate of silver of the strength of forty-five grains to the ounce of water, I cauterized freely the fauces, the laryngeal face of the epiglottis, and as thoroughly as I could, the cavity of the larynx. For a few minutes, the difficulty of breathing and the cough were increased by the application; a large amount of viscid, ropy mucus was discharged, and along with it a small quantity of blood. In the course of half an hour after the application, the symptoms had improved. The laryngeal cough subsided; the respiration became less laborious, and the patient soon after obtained some sleep. In short, from this hour, I had no farther trouble from the case. Occasional doses of expectorant medicines were administered during the day. On the following evening, a slight increase of the cough and irritation came on; but these soon subsided, and were followed by a quiet night's rest.

The next day a considerable amount of a thick and yellow expectoration was discharged, such as occurs on the breaking up of a severe cold, and my patient has since fully recovered.

The power of this remedy to restore a healthy action, where an altered condition of the mucous membrane exists, is well illustrated in the following interesting case:—

In April, 1845, a little daughter of Mr. R. F., of this city, about four years of age, accidentally drank a quantity of sulphuric acid, from a cup which had been left on the table by a servant in the family. The tongue, pharynx, and the epiglottis, were violently corroded and inflamed by the poison.

Mr. Ryland relates this singular fact, that the larynx suffers injury from the swallowing of any of the strong acids, only when they are taken accidentally, in mistake for some other liquid;—that a person bent on suicide, will swallow the corrosive acids well and without pain. In these cases, the larynx is never injured; the epiglottis, during the act of swallowing, completely covers the upper surface of the glottis,

and the acid passes down the œsophagus to the stomach, without impairing, in any way, the organization of the larynx. But if the acid is taken accidentally, immediately that it reaches the gullet, the mistake is discovered, violent action of the muscles of the pharynx is excited, and the corrosive liquid is rejected through the mouth and nostrils.*

In this manner was the acid taken and rejected by the little patient, above named; but, besides the injury done to the back of the pharynx and the root of the tongue, the epiglottis and the opening of the larynx were severely corroded by the concentrated acid. Violent inflammation of these parts, attended with great difficulty of deglutition, followed. By the use of prompt and active measures under the treatment of the family physician, the inflammation was subdued; but the injury done to the epiglottic cartilage, and the lips of the glottis, ended in ulceration of these parts; so that, at the end of two or three weeks from the occurrence of the accident, deglutition became nearly impossible, on account of the injured epiglottis failing to afford sufficient protection to the opening into the wind-pipe.

About five weeks after taking this acid, I was called to see this patient, and found her nearly exhausted for the want of nourishment. If a cup of gruel or water was presented to her, she would seize the vessel with great eagerness and attempt to drink; but the moment the fluid reached the gullet, a violent spasmodic cough would take place, by which the liquid was instantly rejected. Solid food would be thrown out in the same manner, as soon as it reached the pharynx; and this effect, for more than a week, had followed every attempt made to administer nourishment; so that the child was, in reality, at this time, in a state of starvation. Convinced from the symptoms present, and from an inspection of the throat, that ulceration of the epiglottis, and probably of the lips of the glottis, existed, I at once determined to try the effect of a concentrated solution of the nitrate, upon this form of injury. Accordingly, I introduced a small sponge, saturated with the fluid (35 gr. to the oz.), and freely cauterized the epiglottis, and the opening of the larynx.

On the following day, after repeating the application, the patient swallowed a small cupful of thin soup, without exciting the suffocating cough, which, as the attendants declared, was the first food the child had taken for eight days. Some portion of the nourishment, however, must have reached the stomach, sufficient to sustain life during this period. On the third day, a small amount of solid food was taken, and on several occasions during the day, a cupful of gruel.

After this period no difficulty occurred in administering a suitable amount of food, and the patient, who had become much emaciated, rapidly regained her health and flesh.

Dr. Stewart exhibited and explained a modification which he had made of Lallemand's instrument for cauterising the urethra, which he considers to be an important improvement. It consists in having a small hollow canula, open at the sides, to screw on to the end of the instrument into which may be inserted a small cylinder of solid nitrate of silver. In other respects it is precisely similar to Dr. Lallemand's instrument. The advantage claimed for it by Dr. S., in the substitution of the hollow canula and solid caustic, is, that it faci-

* Diseases and Injuries of the Larynx and Trachea. By Frederick Ryland.

litates the operation, and renders it more safe, while it obviates the necessity for pulverizing and melting the nitrate of silver, as is required in the use of the original instrument. Dr. S. further stated, that he had been using the instrument for the period of eighteen months.

Dr. ADAMS mentioned the effect of tobacco smoking as occurring in patients under his observation, which had been a "spasmodic twitching" about the scrobiculus cordis, and generally coming on at evening, after retiring to bed. The discontinuance of the tobacco relieved the symptom. Dr. A. also stated that nine cases of a similar character had been recently reported in the Western Journal of Medicine.

Dr. TAYLOR reported a case of *congenital hydrocele*, in a child, situated on the left side, and extending from the ramus to the symphysis of the jaw, also to the shoulder, cured by absorption—no treatment. Dr. T. also mentioned a case of *chorea* of the abdominal muscles, occurring in a lady who had supposed herself pregnant, and was daily expecting to be confined—cured by *strychnine*. Dr. T. reported having operated upon a female for *recto-vaginal fistula*, the result of an abscess. The operation consisted in converting it into a *fistula in ano*—opening the vagina an inch and a quarter, and extending the rectum two and one-eighth inches. The operation was partially successful. Also reported a case of *crural phlebitis*, in a lady 19 years of age. The disease had existed six or eight weeks, terminating in abscess: Prior to opening the abscess, the circumference of the thigh was 28 inches.

REGULAR MEETING, November 15, 1845.

Dr. MCCREADY reported an instance of an anomalous pustular eruption upon the face, the product of application of irritating substances, cured by the use of the following formula: ℞. Iod. Potassæ ʒ jss. Deut. Iod. Hydrarg. gr. iij: Aq. Distillat. ℥iv Dose, ℥j three times a day. Also apply Ung Iod. Hyd grs x. to the ounce.

Dr. WATTS mentioned having recently met with two instances of anomalous distribution of the *median nerve*, running behind and outside of the artery.

Dr. DUBOIS reported a case of *protrusion of the eye-ball*, following rheumatic inflammation of the "tunica vaginalis oculi." A colored woman of middle age, and of previous good health, had an attack of rheumatism in the latter part of July. In the course of a few days she was seized with severe pain in the left side of the head, and in the left eye-ball. The pain in the eye was deep-seated, and felt as if the ball was being pushed out; vision in the affected eye was nearly destroyed. She came to the infirmary in the early part of August, at which time there was great protrusion of the eye-ball, and vision was very imperfect. The lids were swollen and œdematous. She complained of pain in the head and joints; pain in the eye much less than it had been. She was ordered frequent cupping, free use of mercurial purgatives, and warm anodyne fomentations to the eye. In about three weeks, the ball had resumed its natural position, and vision was completely restored. This same patient presented herself a second time, on the 20th of October; had been recently much exposed while in attendance on a sick person. The protrusion of the eye was as great as in the first attack. Complained of extreme pain in the eye,

and about the brow and temple. The lids were much swollen. On separating them, the cornea and iris were found healthy; but there was a peculiar projection of the conjunctiva at the angle, where it is reflected from the lid to the globe of the eye. *Chemosis* is one of the most characteristic symptoms of the disease. It is of a pale amber color, and without any trace of vascularity. The patient was again ordered to be freely cupped, and take a pill of calomel and opium three times a day. When last seen she was improving.

Dr. GARRISH reported a case of converging squint (strabismus), of 12 years' standing, cured in seven days by the application of strychnine in solution, 12 grs. to ʒij of alcohol, to the eye-brow and temple, morning and evening.

Dr. ADAMS stated that the above case reminded him of one reported in the October No. of the Med. Chir. Rev., where the *tincture of aconite* had been given in neuralgia, to the extent of 80 drops in four days, resulting in the death of the patient on the seventh day, with the usual symptoms of poison; *autopsy* revealed nothing unnatural, farther than unnatural fluidity of the blood. He referred to the case in illustration of the fact, that the alkaloids have an accumulative tendency.

Dr. POST related a case of *fracture of the Radius*, with dislocation of the upper extremity, which had been badly treated, the hand having been placed in a prone position, with a splint over the radius, and also one over the ulna.

Dr. BUEL stated the case of a gentleman 28 years of age, who had had an attack of Scarlatina in February last;. in Sept. following, swelling in the face was observed. He had experienced an attack of Rheumatism in May: came under his care three weeks ago; strength and digestion good; *Diag. Disease of the heart* and *albuminous urine.* Dr. SWETT observed that swelling began in the *face* in granular disease of the kidneys, and in the *feet* in diseases of the heart. Dr. BUEL further stated, that he had cured a case of *herpes zoster*, by application of *ung. stramonium*; stated by Cazenave not to be relieved by local treatment.

REGULAR MEETING, Dec. 6th, 1845.

Dr. FOSTER reported having recently used *alum pulv.* and *nitrat. potass.* grs. xv. and x., three times a day, with the most happy effect, in two cases of gonorrhœa. In one case the discharge had existed ten days; in the other, two months.

Dr. CLARK stated that he had seen two cases of "wry neck" following measles, and that he had heard of two others—in every case, the head was drawn over the shoulder. Dr. C. mentioned these symptoms as being unusual, and asked the opinion of the Society. The accident commenced after the patient had entirely recovered from the original disease. Dr. MCCREADY mentioned that he had observed several cases of "wry neck" following scarlatina.

Dr. BLAKEMAN stated that he had recently used with success, the tincture of *apocynum cannabinum*, in the treatment of dropsy. Dr. WILKES said he had used the *decoction* with success, in similar cases. Dr. SWETT had, however, not been as successful in its use.

Dr. BUEL reported a case of *paralysis agitans*, in a lady 60 years of age. Spare habits, intellect unimpaired; bowels generally constipated.

At the change of life, she experienced a tremor of the left side; general health became affected; suffered from an indescribable uneasiness. The flexor muscles seem to have the preponderance,—such as a contraction of the fingers, and bending of the body forward; requires to be constantly in motion, such as rocking, or riding out; these symptoms had existed 8 or 9 years.

Dr. STEWART mentioned an occurrence which recently happened to a friend in Philadelphia, who, on opening a trunk containing platina commenced sneezing, and continued to sneeze some 40 times; the face also began to swell and became insensible; supposed to be poisoning from the inhalation of platina filings. Dr. S., after alluding to a case of peritonitis, supervening on the reduction of inguinal hernia, reported on a former occasion, read to the Society an account of a similar one occurring after the reduction of an inguinal hernia, which was relieved by the free use of Croton oil, both internally and in frictions around the umbilicus. The disease was attended with most obstinate constipation, and the stomach rejected all the medicines that were administered. A free cathartic effect, however, was produced soon after the application of the oil externally, and after a rapid convalescence, the patient was entirely restored to health.

The whole quantity of oil used in the case, was *ten* drops internally, given in half drop, or drop doses; and 15 drops rubbed over the abdomen. In connection with this case, Dr. Stewart likewise offered some remarks on the purgative properties of Croton oil, when applied externally in frictions around the umbilicus, and concluded by recommending its use in this way in cases of peritonitis, in which disease he considered it highly useful, both on account of its counter-irritant and its purgative power.

Dr. POST mentioned having had a patient whom he had treated in the hospital for *amaurosis* of both eyes, of short duration; had appeared suddenly, without pain in the eyes, or headache. The disease yielded promptly to the internal use of *mercury*, and to external applications of *veratrine*. There had been no previous cause for the disease. Dr. P. further stated, that he had been requested, some two weeks ago, to operate upon a young lady 25 years of age for staphyloraphy, in the *mesmeric* state. When he entered the room where the patient was, he found her sitting in an arm-chair, with her head thrown back, and the eyes closed. When he was prepared to operate, he requested the patient to open her mouth, which she did. He then proceeded with the operation, which was tedious, on account of flow of blood. She would bend her head forward in order to let the blood flow out of the mouth. She raised her hands to grasp the Doctor's, and also bit his fingers—all which goes to establish the truth of mesmerism!

REGULAR MEETING, December 30th, 1846.

Dr. MCCREADY stated that he had been using squills and mercury in a case of dropsy, and that it had immediately produced a prickling sensation in the urethra, on urinating, in the patient.

Dr. TAYLOR stated that the case of congenital hydrocele of the neck, which he had supposed terminated in a spontaneous cure, and which had been reported at a previous meeting, had returned. The child had been vaccinated, yet nothing unusual had presented during the progress of the pock. It had had a very severe convulsion, of more than an hour's du-

ration. Dr. S. was of opinion that neither the vaccination nor the convulsion had any cause in developing or causing a return of the disease. Dr. T. stated that he had been called to a lady, who had chronic pleuritis, with affusion into the cavity of the pleura. The peculiarity of the case was, that she had been out for the week previous; pulse frequent; slight hacking cough; saw the patient the 29th day of disease, when she had very free perspiration; administered pulv. ipecac. comp. in order to facilitate the perspiration. The patient recovered.

Dr. Post mentioned that he had operated upon an elderly lady for *cataract*, who was entirely blind; pupil dilated. Dr. P. operated by extraction, which was attended with copious hemorrhage from the vitreous humor, and continued for some time. The vitreous humor protruded very much, and was snipped off; yet it protruded so much as to separate the lips of incision in the cornea; believes that the lips will contract so as to prevent the escape of the vitreous humor, thereby preserving the form of the eye. No inflammation followed, which had been much apprehended. Dr. P. stated that, during the last week, a case of dislocation of the humerus under the clavicle, which had been unreduced four months, and occurring in a young woman 17 years of age, came into the hospital. The dislocation had been produced by a fall during an epileptic fit, and had not been detected until after three months had elapsed. The dislocation was reduced by Dr. P. in the usual way; while making an examination of the shoulder, the humerus slipped out, but was reduced by placing the knee in the axilla, and making extension with one hand. It was then bandaged and directed to be kept so for one month, before attempting motion.

Dr. Foster stated that he had had occasion to apply leeches to the uterus, and while doing so, a leech escaped into the cavity of the uterus, and inquired of members if they had ever experienced any unpleasant results from a similar occurrence.

Dr. Griscom related a case of violent and aggravated *peritonitis*, terminating fatally, with the absence of one of the most common and characteristic symptoms, viz: tenderness on pressure. The position of the patient during illness, to obtain relief, was upon her side, and upon the edge of the bed.

Dr. Post mentioned a case of injury from a fall, occurring in a female of intemperate habits, which was interesting in two particulars, viz: the existence of peritonitis, and spontaneous emphysema of cellular tissue of the right side of the chest and abdomen. The patient was miserable after the fall, with restlessness, jactitation, extremely small and feeble pulse, and talking incoherently. Post mortem examination revealed the existence of peritonitis, with adhesions of intestine, and effusions of serum into the cavity of the peritoneum and pleura. The liver was enormously enlarged, to twice its natural size, and of a yellowish color.

Regular Meeting, January 17th, 1846.

Dr. Buck reported having removed a *testicle* for a disease of an unusual character. The disease had existed for two years, and had attained its present size during the first year. Its general form was that of the testicle, over which the scrotum moved freely. There was, also, distinct fluctuation at its upper part, and painful at its anterior part. The disease presented more the appearance of hydrocele, with the exception

of its being transparent, and troublesome only on account of its size. Dr. B. visited the patient with the view of opening, by injection for hydrocele, previously to which, however, he made an explorative opening through the covering of the testicle, a bloody fluid only escaping. The incision was extended, when a soft matter of a brownish appearance escaped, which led to the belief that the testicle was disorganized. The operation was then deferred, and in a few days, the testicle was removed, presenting a brownish red appearance, and bands crossing it. The cavity of the tunica vaginalis was filled with this substance. The *tun. vag.* itself, had become thickened to the size of a quarter of a dollar; posteriorly, it was studded with tubercles; a few, also, were found in the body of the testicle. The other testicle was tender, of an irregular shape. Dr. B. mentioned the case of a man in the hospital, with an opening in the larynx, above the cricoid cartilage; and that he had been wearing a silver tube, similar to those usually worn in such cases. The Doctor suggested what he deemed an improvement, which was, that the tube should not only be longer, but should have an opening in the upper part of the shoulder-piece, to enable him to speak, and to prevent the dust from entering.

Dr. Post related, in detail, a case of *variola*, occurring in a child seven years of age, who had been vaccinated in September, and had not healed when seen by Dr. P. three months afterwards. Five days after re-vaccination by Dr. P., performed whilst a brother was lying ill with variola, the child was seized with symptoms of variola; the disease progressed, and on the eleventh day of the variola, which was confluent on the feet, distinct on the face and body, and coherent on the limbs, the vaccine pock had progressed, and had only attained the size and appearance of a vaccine pock of the seventh day. In conclusion, Dr. P. remarked, that the virus of the first vaccination was impure; secondly, that the variola had not been modified by either of the vaccinations. Dr. P. reported having been called recently to see a child in the last stage of *croup*. The disease had been rapid in its course; was seen by Dr. P., on the third day from the time of attack, when he found the child nearly moribund; the eyes were thrown upwards, and the breathing difficult, &c. *Tracheotomy* was performed, and a tube introduced. The breathing improved, became easy and natural; the countenance brightened, and there was a decided amelioration of all the symptoms. This condition of things did not last, however, but for six hours, when it became necessary to remove the tube, on account of its having been choked up with tenacious mucus. The tube was replaced, but owing to the great and increased difficulty of respiration, it was again removed, and the lips of the wound were kept open by the use of probes. Dr. P. remarked, that the chest had been examined before the operation, and that no flatness on percussion existed, but that the respiration was feeble.

Dr. P. also reported a case of *asphyxia*, in a new-born child, with a detail of the labor, which had been tedious, it having been a foot and breech presentation; after the body had been delivered, the head had been retained half an hour after the pulsation in the cord had ceased. The child was immersed in a warm bath, previously adding a bottle of whisky; whilst holding the child, the Doctor produced artificial respiration, and continued it for half an hour, when a feeble gasp was observed, and in the course of another half hour, the breathing was established. The length of time that the child remained in the bath,

was half an hour. Previously to removing the child from the bath, he had observed a strong pulsation in the cord, which was allowed to bleed a few drops—pulsation was noticed in the radial artery—at evening, Dr. P. called and found that the child had improved in appearance—continued to swallow, moved its limbs; the respiration was hurried, and not deep; the child had not taken the breast—had passed meconium freely, also had urinated. The child cried so strongly, that a drop of the *tincture of opium* was directed to be added to four teaspoonfuls of aniseseed tea, of which one teaspoonful was ordered to be given every hour—the dose was administered—the child became quiet almost immediately, was shortly afterwards seized with convulsions, and died fifty-four hours after its birth.

Dr. Blakeman reported a case of *Purpura Hemorrhagica*, with hemorrhage from the uterus, in a young woman twenty-six years of age. Stimulants and astringents had been used prior to being seen by Dr. B. Calomel and saline purgatives were then used, and the patient recovered.

Dr. Buckley reported two cases of *Dysentery* occurring in children two and a half and five years of age—was called ten days before New Year's to the younger child, with symptoms of dysentery; the patient died in three days. He had observed the older child at the time of attending the younger, and it appeared well, with the exception of looseness of the bowels—was called in the evening to the child, with dysentery and fever; continued to get worse, and was exceedingly low with typhoid symptoms, but is now convalescing. Treated the patient with soothing remedies; opium internally, and enemata. There was a third child, in the same house, sick with the same disease; was treated by another physician and died. Dr. B. also used *Nit. Argenti*, saturated with laudanum, from which he had observed decided benefit.

The above disease had been ascribed to *miasmatic* influence, there being an old well in the yard, which was used but very little, and which was offensive to the smell. Also reported having succeeded in vaccinating a child from a scab which had been lying in a drawer for six months.

Dr. Green stated that he had succeeded with a scab twelve months old.

Regular Meeting, February 7th, 1846.

Dr. Foster mentioned having been called to see a lady, five months advanced in pregnancy, who was threatened with *abortion*. She had some pain, with hemorrhage, &c.—administered an anodyne; after flooding considerably, he checked it by plugging the vagina. The *os tincæ* was dilated larger than half a dollar, and the *ovum protruded*—in examining, three days after, he found the *os tincæ* contracted so as barely to admit the end of the finger.

Dr. Post mentioned that he had been consulted during the month of December, by a gentleman, with *Stricture of the Œsophagus*, which had gradually progressed to that degree, as to oblige him to live mainly upon liquids and soft solids. The patient remained under Dr. P.'s charge for several weeks—he had emaciated and become enfeebled.

The patient left to go into the country, and there placed himself under the care of a person who treated him according to the Thompsonian system After being there a few days, he suddenly expectorated a half-pint of blood mixed with pus; after this, he could eat solids. There

was dullness, with ægophony behind and below the scapula of the right side. The cause of the stricture, in the opinion of Dr. P., was the rupture of a tumor or abscess, pressing upon the œsophagus, which had opened into the bronchi of the lungs; and the contents being expectorated, the stricture was revealed.

Dr. P. also related the case of a colored man, who had his thigh amputated in the hospital by Dr. Cheesman, for disease of the knee-joint. He mentioned the case to show with what rapidity the disease had progressed. The patient had been occasionally complaining of pain in the joint for several years, but not to that degree as to require a respite from his daily avocations. Two months ago the pain became worse, and he was obliged to give up work, ascribing the increase of pain at the knee to a slight injury. The disease progressed rapidly, and he was obliged to have the limb removed at the thigh. There was a complete dislocation of the tibia and patella—the articular cartilages were also destroyed. There was an abscess above the knee, involving the thigh bone, and lying beneath the periosteum.

Dr. BUEL reported several cases to show the tenacity of the infection of scarlatina, occurring four weeks after the rooms had been thoroughly cleansed and ventilated, yet several persons in succession contracted the disease.

At the *regular meeting* of the Society, Feb., several cases were reported, which have already appeared in our Journal (vol. vi., p. 352, etc.).

Dr. STEWART introduced a young man 18 years of age, who was afflicted with congenital *eversion of the bladder*. As is always the case in such patients, the anterior walls of the abdomen and bladder were wanting. The posterior walls of the bladder were florid, being somewhat irritated by friction, and protruded, showing on its lower surface the mouths of the waters, from which the urine flowed in interrupted drops.

Dr. DUBOIS mentioned the case of a child who had died after an illness of 18 hours. The symptoms were dyspnœa, with heat of skin—death, preceded by a slight convulsion, was sudden and unexpected. *Autopsy.*—The thymus gland was found to extend from the cricoid cartilage to the lower end of the sternum, 2 3-4 inches in length, by 3 1-2 in width, and weighing one ounce, the ordinary weight being only four drachms. The lungs were healthy.

Dr. MCCREADY mentioned a case in which a foreign body, impacted in the rectum, caused symptoms simulating piles. A gentleman, whilst at stool, was seized with violent pain in the fundament, which he attributed to hemorrhoids. The pain continuing, he sat in warm water half an hour. No relief being procured, no piles being visible, an examination was instituted, and a sharp body was discovered, which had been forced down until its point had caught in one of the folds of the mucous membrane, and which lay transversely across the gut near its orifice. On being extracted it proved to be a *bone of the head of a codfish*, over an inch long, which the gentleman had swallowed three days previously. Dr. McC. likewise mentioned a case of what proved to be Typhus Fever, in which most of the characteristic symptoms were absent, or but slightly marked, while the patient, a young man, suffered several paroxysmal attacks closely resembling hysteria in the female. The patient died.

Dr. BUCK exhibited a recent *dissection of the perineum and genito-urinary organs*, with the view of showing the manner in which the super-

ficial fascia of the perineum is continued upon the penis, forming a membraneous sheath, that closely adheres to, and envelopes, the *corpus cavernosum*. At the same time that it encloses between its layers, the *corpus spongiosum urethræ*, and is interposed between the extremity of the corpus cavernosum and the glans penis. This same sheath is also continuous from the dorsum of the penis at its root, to the symphisis, and forms the triangular, or suspensory ligament of the penis. The specimen consisted of a section that presented the inferior aperture of the pelvis, from which the integument, and the cellulo-adipose subcutaneous tissue, had been removed, as well as the masses of adipose and cellular tissue, that fill up the ischio-rectal fossæ, bringing into view the muscles of the perineum invested with their proper aponeuroses, which is termed the fascia of the perineum or the inferior fascia of the perineum ; also, the ano-penic fascia. Dr. B. remarked that the minutest description of this fascia was found in Velpeau's Surgical Anatomy, which represents it as continuous with the fascia lining the walls of the Ischio-rectal fossæ, and extending downwards, over the posterior edge of the transverse perinei muscles, thence forwards over the inferior surface of these muscles as well as of the ejaculators and erectors ; laterally it is inserted into the edge of the rami of the ischium and pubes, and forwards, it is lost upon the penis, forming a sheath to it, between the ejaculator and erector on either side. This fascia sends upwards a septum that unites to the triangular ligament, thus forming three distinct sheaths, independent of each other, but founded anteriorly in the general sheath of the penis. The middle sheath embraces the two ejaculators, with the bulb and corpus spongiosum, the lateral sheaths embrace the erectors with the crura of the corpus cavernosum.

Morton, the author of a recent English Treatise on the perineum, describes the fascia as continued forwards into the scrotum. Dr. B. remarked, that the peculiar manner in which this fascia forms a sheath to the penis, and also forms the suspensory ligament of the penis, had not been hitherto described by anatomists, and to this point he wished to call the attention of the Society. He showed from the specimen exhibited that the lateral insertions of this fascia, into the rami of the ischium and pubis, as seen in the perineum, were continued forwards on either side of the penis, approaching each other till they meet at the symphisis, above the penis, and extended to the upper margin of the symphisis, there forming the suspensory ligament. From these insertions, these fasciæ proceeded into the penis in the following manner: It closely adheres to, and envelopes the corpus cavernosum, and embraces between its layers the corpus spongiosum, so as to send one layer above and another below that body ; at the extremity of the corpus spongiosum, it is interposed between it and the glans penis, being inseparably united to this latter body. This peculiarity of structure allows the corpus cavernosum to be completely insolated from the corpus spongiosum, and glans, by dissecting off this membraneous sheath, the proper membraneous coat of the corpus cavernosum itself remaining entire and intact. The dorsal vessels of the penis are also inclosed between the deep layers of this fascia, and are raised with it. These branches are distinctly seen passing off on either side, forming beautiful zones encircling the corpus cavernosum, and terminating at either margin of the corpus spongiosum. The adhesion of this sheath to the sides of the corpus cavernosum near its root is looser than anteriorly. Dr. B. further remarked that important

pathological deductions might be drawn from this peculiarity of structure; for example, occasionally, cases of extravasation of urine from stricture of the urethra present themselves, in which the urine, instead of distending the scrotum and peritoneum, as most commonly occurs, forms a circumscribed swelling over the pubes, above the penis. A well marked instance of this, Dr. B. related, as having occurred in the New York Hospital under the care of Dr. Post. Cases are also met with, in which urinary fistula extends the whole length of the penis, and terminates behind the corona. In both descriptions of cases, Dr. B. supposes the urethra to be perforated anterior to the triangular ligament, without the fascia in question being involved. In the former case, extravasation meeting with the least resistance along the sides of the penis near its root, extends in that direction to the pubes, where the looseness of its tissues admits of its forming a more expanded swelling. In the latter case by a more gradual process, the urine works its way beneath the sheath to the extremity of the corpus cavernosum, and there an ulcerated opening forms between it and the corona. Other pathological deductions doubtless may be drawn from further observations on this point.

Regular Meeting, March 7th, 1846.

Dr. Dubois mentioned having under his care a lady, aged 70 years, with *varioloid*—that she had been inoculated when young, since which time she had been vaccinated three times, and failing in each instance. Similar instances were stated by Drs. *Post* and *Blakeman.*

Dr. Wilkes mentioned that a child had been brought to the Eye Infirmary, with a congenital cicatrix of the upper lip, simulating cicatrix (or the operation of hare-lip).

Dr. Green stated two instances of sudden death, and in neither case was there any satisfactory cause. One was a female, who had been delivered of a child before the arrival of a physician. The placenta was removed; there was unusual hemorrhage; the patient sank and died. The second case was a gentleman who had been subject to rheumatism. Thursday week, he complained of being ill, with pain at centre of sternum, for which he had taken some active medicine. The pain increased—was sitting up reading a newspaper, when he instantly fell back, and was dead.

Dr. Buel stated that he had been called to a lady, who, whilst eating prunes, imagined that she had swallowed a prune-pit, which had stuck in her throat. An emetic had been administered, but producing no relief, a probang was passed, and the Doctor supposed to have met with an obstruction at the cardiac orifice of the stomach. No relief ensued; the probang was passed the second and third time, and on the last occasion the sensation disappeared.

Dr. Maxwell related a case of puerperal convulsions occurring at the expiration of the eighth month of gestation. The subject, a delicate female, with first child. The convulsions continued unabated, and were violent for eighteen hours, when they ceased, and the patient died six hours afterwards.

Dr. Griscom related a case to illustrate the insufficiency of arrow-root, as an article of nourishment for children.

Regular Meeting, March 21st, 1846.

Dr. M'Cready related in detail the case of a lady, a widow, who had manifested symptoms of insanity, a form of religious melancholy.

When seen by Dr. M'C., her countenance presented the expression of a person very much frightened, and sallow; breath very offensive. A purgative was ordered. The breath and expression of countenance improved after the operation of the physic. Symptoms of chorea were soon manifested, coming on suddenly. Sensibility of skin augmented—vision obscure—taste much impaired, and hearing dull—coma set in and increased, and the patient died at the end of eighteen days. No autopsy. Dr. M'C. supposed that latent disease of the brain had existed. Several cases were reported by Dr. Stone, which have been published in our May No. for 1846 (P. 350–1–2).

Dr. Post mentioned, in connection with report of *cancer of the penis*, by Dr. Stone, a similar instance of cancer, occurring in a sailor. The penis was removed, at which time there was no perceptible enlargement of glands; the parts healed, and the patient left the hospital apparently cured. Recently the patient had returned with diseased glands of the groin, those of the right having ulcerated.

Dr. P. stated a case of congenital *webbing of the fingers*. The mode of operating was after the plan of Dr. J. Kearney Rodgers, which consisted in making a flap from the dorsal side of one finger, and secondly, from the palmar surface of the opposite, and then to encircle the finger with the flap. Secondary hemorrhage ensued in this instance, which made the cure not only troublesome, but tedious.

Dr. P. related a case, which he considered unique in character, of a gardener, aged fifty-eight years, and latterly of temperate habits. Ten days previously to being admitted into the hospital, had observed a livid spot upon the lower lip, which continued to extend, until it involved the whole lip, and sloughed—attacked ear and arm also.

Regular Meeting, April 4th, 1846.

Dr. M'Cready mentioned the case of a gentleman, a free liver, who was subject to attacks of indigestion, producing violent colic; pain severe; no vomiting; pain in epigastrium; much tension of the abdomen by flatus, by ejecting which he was always much relieved; pulse 136; skin warm, tongue dry, parched, &c.; gave a purgative of calomel, followed by opium. There was always a yellowish hue of skin after these attacks—cured by *purgatives*.

Dr. Griscom stated that he had occasion to prescribe *Ung. Hydrarg.* to be applied to an erysipelatous surface, and that the apothecary made a mistake, and gave *Ung. Hyd. Potassæ*, which had been applied, with the effect of removing the erysipelas almost immediately.

Dr. Garrish mentioned a case of a female, who, wishing to urinate, stepped to an adjoining room to make use of a tub, formed from a barrel for said purpose. In so doing she wounded an artery in the left *labia majorum;* hemorrhage was profuse; she fainted; application of cold did not arrest it. He finally ligated an artery in the labia maj., which checked the hemorrhage. Dr G. also stated that he had recently delivered a woman of a child, born with two incisor teeth.

Regular Meeting, April 18th, 1846.

Dr. Wilkes reported three cases of purpura (See *N. Y. Jour. Med.* for July, 1846, p. 17.

Dr. M'Cready reported a case of convulsions, occurring immediately

after delivery. The patient was a young woman, confined with her first child. The labor had been natural and easy. Child was born about 4, A. M. Patient then slept till 6, A. M., and on waking had a convulsion. She was bled to about a quart, and *Tart. Ant.* was administered without relief. A few hours after, *V. S.* was repeated, and a turpentine enema given, with cold affusion to the head, and sinapisms to extremities. At 1, P. M., no amendment, patient having had several convulsions, and no consciousness since first attack. Croton oil was now given, but without effect, the patient dying at 4, P. M. The only assignable cause was, that she had had considerable mental uneasiness and anxiety.

Dr. BULKELY mentioned a case of cutaneous disease of an anomalous character. A man thirty years of age, who had always enjoyed good health till about three weeks before attack; since then general *malaise* by pain and tingle of one elbow. These symptoms were relieved by local applications, and an emetic, but was immediately succeeded by an eruption on the trunk and in the bend of the elbows, knees, and thighs, presenting two perfectly distinct characters. On the chest, and down as far as the navel, it took the appearance of popular syphilis, or variolous eruption, at the third or fourth day, having a well-marked areola, &c. Below the navel it had the appearance of *purpura*, and was accompanied with considerable soreness—at the articulations both forms of the eruption existed together. The pulse was 90; little fever; no great loss of strength; appetite poor; stools dark colored. The first described eruption soon assumed a vesicular form, and after about five days the areola dissappeared, the soreness left him, and in a week he went out. The variola left brownish spots behind. There was no suspicion of syphilis. Dr. B. would not undertake to say what the eruption was, but thinks it may have been an anomalous case of varioloid. Dr. B. also mentioned a case of *psoriasis* in a child six years of age, in whom the disease extended from head to feet in a severe form, with considerable swelling, and desquamation very abundant, to the extent of two handsful in a night. *Sulphur* and *arsenic* had been given before Dr. B. was called. When given in the acute form of squamous diseases, these remedies always aggravate the complaint, as was the case in this instance. In the chronic stages they are the best remedies. The patient is now recovering.

Dr. BUCK reported a case of fractured spine, published in our Journal for July last, p. 20.

Dr. SWETT described two cases of *ship fever*, in which no ulceration of Peyer's glands existed; one of these only was seen during life, and was correctly diagnosticated, although Dr. S. had never before met with such a case. Both these cases were sailors in different ships, although they occurred at about the same time. In the case seen during life, there was a very abundant maculated eruption, having the appearance of *petechiæ*. There was high delirium, and some of the ordinary appearances of the typhoid fever which is accompanied by ulcerations of Peyer's glands. Dr. S. was of the opinion that there are two distinct forms of fever, having different causes, and predicts that there will be more such cases as these in the course of the season.

Dr. POST had been called about a fortnight since to a colored girl, who had had frequent *otorrhœa*. On the morning of the day on which he was called she was slightly delirious, and at 12 o'clock rose to furious

mania. Saw her at one o'clock; she then took very little notice; there was no heat of the skin. At that time he merely gave directions to prevent injuring herself. One hour after administered a draught containing about five drops of *tinct. opii;* after which she soon became quiet and went to sleep. On calling at the end of another hour, found her dead. Dr. P. proposed trephining the mastoid process, with a view of giving vent to any collection of matter in that region; *no autopsy.*

Dr. P. related the case of a boy in the hospital, aged 15, with a severe injury of the knee. The case had been entirely neglected, and when brought to the hospital the limb was much distorted, and a large collection of matter existed, extending from the ankle to the hip, with much emaciation and hectic. The matter was evacuated, bandages applied, and tonics administered, and he improved for 4 days; after that flagged again, when it was decided to amputate the thigh. On examining the removed limb, large collections of pus were found, throughout, with disease of the cartilages of the knee joint, and a complete separation of the apophysis of the tibia. Patient is improving since the operation.

Dr. P. also exhibited a specimen of encysted *encephaloid disease*, which he had removed from the breast of a woman in the fourth month of pregnancy. It was thought best to run the risk of producing abortion, as the disease had grown rapidly during the last three months.

Regular Meeting, May 2, 1846.

Dr. Griscom reported a case of *colic* arising from indigestible food. The patient, who was under the charge of Dr. J. R. Wood, was seized with severe pain, with short intermissions, pulse 130 to 140, tongue dry and brown, bowels obstinately constipated, no passage having been obtained by the administration of calomel and jalap, salts and senna, croton, oil, and enemata; a large enema was given, which produced evacuations, but this was followed by vomiting, which continued in spite of remedies. The patient was seized on Thursday; on Monday evening following, the vomiting became stercoraceous, and so completely was the peristaltic action inverted, that an injection of castor oil was returned by the mouth in four hours after it was given. He had been taking calomel and opium. Supposing that the opium might have had an influence in causing the vomiting, it was discontinued, and morphine substituted. The pain and vomiting were immediately relieved, and in 24 hours the patient was decidedly convalescent; 20 drops of morphine were given. Dr. G. also reported a case of *scarlet fever* in a man of 45 years. First saw him on Tuesday. The eruption appeared on Wednesday evening about the neck; as it extended down the trunk, it assumed in some points the appearance of small-pox, became very intense, affection of throat slight; on Friday he coughed up a little blood; his tongue was then white and livid; pulse 80 to 85, full and soft. On Saturday morning he passed bloody urine, then vomited blood, and bled from the nose; at 11 A. M. died. No purpuric eruption.

Dr. Garrish reported a case of *uterine hemorrhage.* The labor had been natural, and the uterus remained contracted. An hour and a half from that time was called again, and found the patient fainting, pulse scarcely perceptible, and uterus full of coagula; poured cold water upon, and applied ice to, the abdomen; introduced the hand into the uterus, but could produce no contraction. At length, however, there came on an

hour-glass contraction, so that the hand could not be carried to the fundus; introduced the hand full of ice and carried it to the part where the hour-glass contraction relaxed, and then the womb contracted regularly, and the hemorrhage stopped.

Dr. BLAKEMAN stated the case of a man, who for a long time had been supposed to be dying with phthisis, having a cough with purulent expectoration, &c., but who, a few days since, coughed up a *hog's bristle*, with relief to the symptoms; did not know how it got into the trachea. Similar cases were brought up by other gentlemen.

Dr. POST reported a case of *Inguinal hernia*, in a female aged 32, which had existed for a long time, but always reducible till about a week before, when it became painful. There had been no vomiting, until the morning when Dr. P. saw her, and the day before she had taken a cathartic, which operated. The tumor was the size of a turkey's egg; after the warm bath, v. s., application of pounded ice, &c., it being still irreducible, the operation was had recourse to on Monday; on cutting down to the sac, a thick membrane was found, which being divided was found filled with serum and fibrin in considerable quantity. The intestine strangulated, was very small, only about the size of a filbert, and as well as the sac, covered with a thick layer of fibrin. There seemed to be no stricture except what was occasioned by the fibrin effused. The adhesions of the intestine to the sac were so strong as to render the reduction very difficult. Since the operation, the bowels have been opened by enema and once spontaneously; the wound is now suppurating and everything going on favorably. Dr. Palro stated that in the case mentioned at the last meeting, abortion did not follow the operation.

Dr. VANDERVOORT mentioned a case where intense tenesmus and strangury were produced by a mixture of *tinct. cantharides*, one part, and *tinct. aloes*, three parts; two doses of 3j. each were taken.

Dr. BUEL reported a case of *difficult labor* On first examination, the os uteri was found fully dilated, and the bag of waters protruding, but no presentation could be felt. Ruptured the membranes, when there was an immense gush of water, and then the knees were found to present; all went on well, until the head reached the outlet of the pelvis, when it was arrested and remained four hours without making any progress. I then made strong traction, but was still unable to deliver, and was obliged to resort to perforation. The patient is doing well; she has had but one living child in four labors.

Dr. GREEN reported a case of *breech presentation*, in which the head was delayed an hour in the pelvis. The child was in a state of asphyxia when born; was put into a warm bath for five minutes, then wrapped in warm flannels, and the lungs inflated. After three-fourths of an hour the heart began to pulsate, and soon after it breathed. It only lived six hours, dying in convulsions.

[*To be continued in our next.*]

ART. XI.—*History of Seven Cases of Traumatic Tetanus, treated successfully by Strychnine.* By J. W. FELL, of New York.

DEAR SIR:

In compliance with your request, I herewith furnish you with the histories of seven cases of tetanus (six of them *certainly* traumatic, and most probably the seventh), which have been treated by strychnine with success. The first two were published in the New York Medical and Surgical Reporter, but as they will be more interesting in connection I send them to you. The 6th case was furnished me by Dr. Botsford, the 7th by Dr. Vanderpool, of Fourth street.

You will observe that in every case, as soon as the specific twitching was produced, the tetanic spasms abated, and they convalesced rapidly. I have found this distress over the diaphragm (caused, no doubt, by its spasmodic contraction) the most troublesome symptom in all the cases.

I would, from the experience I have now had, administer the strychnine as follows. I should at once give an eighth or tenth of a grain, then, in two hours, the sixteenth, then reducing the dose just sufficient to produce its effect after each one. The great object is to produce the twitchings as soon as possible, they can then be kept up by a much smaller dose than the one which first produced them.

Hoping they will meet your approbation,
I remain yours very truly.
J. WELDON FELL, M. D.

New York, October 9th, 1845.

DOCTOR LEE.

On the Use of Strychnine in Tetanus.

CASE 1.—*Aug.* 1st, 1845. Visited William Ellsworth, aged 7 years, living with his parents, in Hudson county, New Jersey. Found him in a kind of stupor, but upon his father's taking hold of him, he was thrown into a violent spasm which lasted a few minutes, during which his body was curved backwards, jaws set, countenance distorted, and his body resting entirely upon his head and heels. After the spasm ceased, he complained of pain and distress over the diaphragm, jaws stiff, and almost closed, difficulty in swallowing, pain along the spine, and soreness in the left groin. The spasms were excited by touching him, or by his attempting to swallow. During the spasms the muscles were so rigidly contracted that he could be raised by his head alone.

About ten days ago he injured his left knee with a thorn. While playing a few days after, it commenced swelling, and to be painful; but by the application of some domestic remedies, the swelling was reduced, and the pain allayed. Soon after he became restless and uneasy, complained of distress about the præcordial region, pain in the masseter and temporal muscles; his voice changed, he had difficulty in swallowing, and these symptoms were attended with slight fever. These symptoms increased until yesterday, when the characteristic spasms of tetanus set in. His mother immediately applied a blister to the knee and one to the spine. The glands in the left groin were enlarged and tender.

The case was evidently one of traumatic tetanus, well developed and rapidly advancing, and demanding the most vigorous treatment. I at once determined to administer some one remedy, and to continue its use until some decided effect was produced by it. I reviewed in my mind the many remedies heretofore used, viz., opium, alcohol, turpentine,

iron, digitalis, tobacco, aconite, &c. &c., and knowing they had all failed, in the majority of cases in which they had been used, I, from a suggestion of Professor Mott's, during the previous winter, determined to use the strychnine, and at once prescribed it in doses of the fourteenth of a grain, every two hours. I also ordered a poultice to the knee, and the spine to be rubbed with ung. tart. antimony. The strychnine produced its peculiar twitching effects after the fifth dose. It was given as above for two days, each dose after the fifth producing the specific effect. The intervals between the doses were now increased, until, on the sixth day, he only took it three times. He had no spasm after the second day; he convalesced slowly, until the sixteenth day, when the strychnine was discontinued, as he had entirely recovered.

I have frequently seen his father since, and he informs me the boy has enjoyed perfect health since.

Case II.—*Oct.* 4, 1846, 10 o'clock, P. M. Was called in haste to see Miss M——, of Sullivan street, aged 25 years, under the care of Dr. E. Vanderpool. Found her in a spasm; the muscles of the left side only being in a contracted state; jaws set, left leg and arm stiff, body bent to the left side, extremities cold, pulse feeble, and left side of the face distorted. Ordered some wine, as soon as the spasm passed off, and she could swallow. Dr. Vanderpool having been at once sent for, now arrived, and gave me the following history of the case. Miss M. had been suffering for several months with a bad toe, the nail of the great toe of the left foot having grown under the flesh. She had not been out of the house for months, she refusing to have the nail removed. A few days ago, however, she consented, and Dr. Vanderpool removed a part of the nail; the next day she went out riding, and directly after her return, the toe commenced swelling, and to be very painful, the pain extending up the leg, side, arm, and soon affecting the temporal and masseter muscles of the left side.

Dr. Vanderpool and myself examined and found the toe and foot much swollen and tender, the lymphatic glands of the left groin enlarged and painful, the muscles of the left side contracted, jaws stiff, but not entirely closed, difficulty in swallowing, masseter and temporal muscles contracted and painful, and uneasiness about the præcordial region; during the spasm the diaphragm was powerfully contracted. Considering this also a case of traumatic tetanus, I suggested to Dr. V. the use of strychnine in this case; he preferred, however, waiting until morning. He made a free incision upon the toe, and prescribed the following:

℞ Tinct. Assafœtidæ } a tea-spoonful every two hours.
" Opii aa }

Oct. 5, 10 A. M. Upon visiting the patient this morning, we found her much worse. Spasms more severe and frequent, jaws nearer closed, and the difficulty of swallowing greater. We gave her

℞ Strychnin. gr. j.s. } ft. pills no. xvj. one every two hours.
Extract. Juglandis C., ʒss. }

10 P. M. Was called in haste to see the patient, as her friends thought her dying. We found her under the specific effect of the strychnine. Ordered the pills discontinued until morning.

Oct. 6, 10 A. M. The patient slept well from 12 to 4 o'clock this morning, being the first sleep she has had in some days. She is much improved—ordered one pill every three hours.

7 P. M. Has had some slight spasms during the day; jaws a little relaxed; gave her nine whey-pills, to be continued as above.

Oct. 7. Miss M. slept well during the night, and the irritability which had been so marked, has in a great measure disappeared. The twitching is produced by each pill: it commencing about twenty minutes after taking the pill, and lasting about fifteen.

Oct. 8. No spasm since yesterday; ordered one pill every six hours; continue the wine whey.

Oct. 10. Discontinued the pills, as the tetanic symptoms have all disappeared.

Oct. 16. Miss M. is going out as usual, quite well.

The only peculiarity about this case, was the contraction being confined to the left side, making it a case of Pleurosthotonos.

Case III.—*Nov.* 15. Visited Mrs. J. of Thompson street, aged 27 years. About ten days ago she ran a needle into the palm of her hand; it breaking, a piece was left in the wound. This was removed by a barber in the vicinity within a few days; but the hand and arm continued sore and painful. Yesterday she complained of having taken cold, as her jaws were stiff and deglutition painful. During last night she had hot flushes and chills. I found her complaining of difficulty of swallowing: jaws very stiff, and nearly closed: pain and distress in the diaphragm, and some slight spasms. Ordered the following:

℞ Strychnin. gr. j
Ext. Juglandis ʒss. Mx. } in pill nos. xiv—one every two hours,

the hand to be bathed frequently in hot water and ashes.

Nov. 16, 9 A. M. The third pill produced the twitching. This so much alarmed the family, that they have discontinued them since. I immediately ordered them to be given again. They produced the twitching in about ten minutes, it lasting sometimes as long as half an hour.

4 P. M. Patient some better, still slight spasm.

Nov. 17. Has had no spasm since yesterday: the swelling in the hand and arm is much reduced: still painful. Ordered a pill every four hours, and a poultice to the hand.

Nov. 18. The patient slept well last night for the first time since she has been unwell. Jaws relaxed. One pill every six hours.

Nov. 19. Patient about the house as usual. Arm stiff. Ordered two pills per day.

Nov. 21. Each pill produces the twitching; but as the patient has completely recovered, I ordered them discontinued.

The hand now did well, and healed rapidly.

Case IV.—*May* 9, 1846, 8 o'clock P. M. Thomas Brown, of Hoboken, New Jersey, called at my office, and requested me to visit his sis er-in-law, Miss Jane Savage, aged 16 years, then at his house, suffering with lock-jaw. On my arrival at his house, I learned that Dr. Julien had been in attendance. I at once had him sent for, and upon his arrival we visited the patient. Upon our entering the room she was thrown into a violent spasm, which lasted about a minute, during which her body was bent backward, resting upon her head and heels, her countenance distorted, and her pulse quick and irregular. After the spasm passed off, we found her jaws were entirely closed and set: pain along the spine, and over the region of the diaphragm: difficulty of deglutition and respiration, and her pulse still quick. Learned the following history: Some days since she ran a carpet-tack into her

right thumb; soon after she took cold in it while washing. It commenced swelling and to be painful. It grew worse until about forty-eight hours since, when she was seized with the tetanic spasm. Dr. Julien was then sent for: he bled her, and ordered counter-irritation to the spine. This morning she was worse, the spasm more frequent and severe. He ordered an injection, and invited Dr. Hosack to see her. They visited her at 12 M., and at once ordered her to take large quantities of Sherry wine and arrow-root, and a poultice of herbs to the spine, but as she has a very regular set of teeth, and her jaws being set, and as it is very difficult for her to swallow, it was almost impossible to give it, up to the present time, and about nine o'clock P. M., her mother informs me that she has taken about a wine-glassful of the wine and arrow-root. The patient is evidently growing worse. I informed Dr. Julien of the result of the three preceding cases, and advised the use of the strychnine in this. After due consideration *he* wrote as follows: ℞ Strychnin. gr. j, Spts. Vin. Rectf. ℥j M.:—Of this 30 drops to be given every two hours. The strychnine was procured and the first dose given, at half-past ten, P. M. In about fifteen minutes the twitching commenced: it lasted about twenty: the patient then fell asleep. At half-past twelve she took the second dose, with about the same effect, again falling asleep. She continued to take the drops every two hours, until twelve o'clock M, Sunday.

Sunday, May 10. The patient, at eight o'clock this morning, sat up in the bed and fed herself with a tea-spoon, her jaws having relaxed very much, and the spasms almost ceased. At 12 M., Drs. Julien and Hosack called, and from some cause, carried the strychnine away with them, giving as a reason to the family that it would injure her health ever after, if she continued to take it. They then ordered her (now she could swallow) to take a gallon of Sherry wine a day; and said she would certainly recover. At 9 P. M. Mr. Brown called at my office, and communicated the above to me: he also said Jane had eaten a piece of beef-steak just before he left home. He asked me to give him a prescription for another bottle of the strychnine, as he was satisfied it had produced the great change in the patient. I did so, with directions to give it as before, *if there was a return of the spasms*. But as they did not return, the drops were not given.

Dr. Julien continued to visit the patient, and ordered the wine to be given in large quantities for some days.

May 16. I visited Miss S. to-day, and found her in a state of intoxication. I at once advised the wine to be discontinued.

June 10. Mrs. Savage and her daughter Jane called at my office to-day. Jane is in a complete state of fatuity. Dr. Julien has been treating her for some days without any benefit. Mrs S. now wished me to prescribe for this difficulty. I, with the advice of Professor Mott, put her upon a course of Sub. Mur. Hydrarg., and applied counter-irritation to the back of the neck. This course was pursued until it produced gentle ptyalism: this was kept up for about two weeks, with decided improvement.

June 28. Mrs. S. and daughter called to-day. Jane has entirely recovered. She continued perfectly well, and was married September 20, 1846.

This was undoubtedly a case of traumatic tetanus from a punctured wound, yielding at once to the strychnine; but whether the wine or

the strychnine produced the fatuity, I leave for others to decide. Why Dr. Julien carried away the strychnine (without consulting me) while the patient was improving under its use, I also leave.

Case V.—*May* 10, 1846. Visited Mrs. Andrews of Robinson street, aged 55, under the care of Dr. Condit. Dr. Conger, Sen., having been called in consultation yesterday, found her suffering with completely developed tetanic spasms, occurring every few minutes, during which her body was bent backward, countenance distorted, violent contractions of the diaphragm, and jaws set during the remissions, her jaws were nearly closed, deglutition very painful and invariably exciting a spasm, pain and rigidity of the right temporal and masseter muscles: the head was drawn to the right side, the right arm and shoulder painful, the glands in the right axilla swollen and tender. The patient, some time since, bruised her right elbow, but the pain ceased in a day or two and was forgotten. A few days since the right elbow and arm commenced to be painful, the pain extending up to the shoulder and side of the neck. She thought she had taken cold, and did not feel alarmed until the spasm commenced. This patient had been bled, and had taken tincture opii, &c. &c. She however continued to grow worse to the present time. I suggested to the above named gentlemen the use of the strychnine. They at once gave their assent, and it was given in doses of one-twelfth of a grain every two hours. It produced its peculiar effect after each dose. She was also ordered injections from time to time, as her bowels would not move without it. On the next day the dose was somewhat diminished, as its effects were very powerful. The spasms ceased after the fourth day. This patient convalesced very slowly, her arm being weak and painful for some time: this, however, may have depended upon her age.

August 21. Called and found Mrs. A. had just returned from the country; she has quite recovered. I have called several times since, and she continues quite well.

Case VI.—This case occurred in the practice of a gentleman in Sullivan Co., N. Y., and as he has kindly furnished me with a history of it, I will insert it here.

"Dear Sir:—Miss ——, of this village, aged 14 years, robust and healthy, ran a piece of bone in the sole of the foot, about the last of October. There was a little irritation about the foot for three or four weeks after the reception of the injury, and two or three times during the period there was slight ulceration; but little pain was felt by the patient until about the time she was attacked by the tetanic symptoms.

"She had, however, from time to time after the injury and previous to the tetanic attack more or less 'stiffness and numbness' in the injured leg. She states, also, that at different times during this period, 'her leg was hot and had red streaks upon it;' these lasted a day or two and then disappeared. She had nothing but some slight domestic remedies applied, until her case became alarming by the spasmodic action.

"It had been my determination ever since reading the result of your cases published in the 'Reporter,' if called to a case of tetanus, to treat it with strychnine. When my attention was called to this case, I was destitute of this medicine, and none could be obtained in the

vicinity; accordingly the case progressed for forty-eight hours before the remedy was obtained and administered.

"In the meantime, I pursued the following course: There were violent pain and spasms at intervals, commencing in the affected leg, and extending along the muscles on either side of the spine to the head and jaws, violent distress about the diaphragm, with considerable sympathetic fever.

"My first effort towards subduing the disease was making an incision with a bistoury, about an inch and a half in length, and of sufficient depth to thoroughly divide the plantar aponeurosis, which was wounded by the piece of bone. I then filled the incision with lint saturated with ol. terebinth, and a bread and milk poultice to be applied over it. I then used V. S. ℥xxvj. on the leg, and administered the following: ℞ Calomel. grs. xx, Jalap. xv., to be followed by sal Epsom in two hours. After this had operated briskly and freely, I gave her a teaspoonful of Tinct. Opii every hour, with a view to subdue the spasms. After she had taken two or three doses, the spasms were somewhat relieved and the pain less. This *truce* lasted four or five hours. She became worse, although the Tinct. Opii was continued as above; her body curved more backward, her joints were set and the spasms more severe. The dose of Tinct. Opii was increased, but it failed to subdue the disease. By this time, I obtained the strychnine, and administered it with complete success; so soon as it produced its peculiar twitching effect, the spasm abated and the patient rapidly recovered: in a few days she was about as usual. The dose given was $\frac{1}{14}$ of a grain every two hours, at first, gradually increasing the intervals.

"Dear Sir:—I send you above a history of a case of traumatic tetanus I lately treated with strychnine. You are at liberty to make what use you please of it.

"In great haste, yours, &c.,

"To J. Weldon Fell, M.D. (signed) Clement Botsford.

"*Bloomingburgh, Sullivan Co., N. Y.*"

Case VII.—This case was furnished me by my friend, Dr. E. Vanderpool, and although it was not so well marked as some, still I think there can be no doubt of its having been an incipient case of traumatic tetanus.

"Dr Fell:

"Dear Sir:—The case of tetanic rigidity you request a history of, though only partially developed, is, I think, sufficiently interesting to be published, as tending to commend the use of strychnine in this most alarming malady.

"The 2d of Sept., 1846, I excised an elliptical piece of the cutis, on the radial side of the metacarpal joint of the thumb of Mrs. ——, in view of removing a cicatrix from the point of a scissors with which it had been punctured some three months previously, in hope of curing a neuralgic condition of the arm, which had been thus produced.

"On the 10th Sept., 1846, just eight days after the operation, the wound having healed, a slight but permanent contraction of the arm was noticed, with rigidity of the flexor muscles, particularly the biceps, which was painful upon pressure. That night she was unable to sleep, from the uneasiness and increase of this rigidity involving the muscles

of the neck and jaws, accompanied by a 'violent cramp or drawing' in the region of the diaphragm on the affected side. These symptoms all became aggravated by attempting to extend the arm, or by any motion of the body, and produced great general distress, with nervous tremors, 'shuddering and shaking' of the whole body.

"The arm fell on the inner side, as she expressed it, corded in its whole length. Next day there was a little abatement of the above symptoms, but on the 12th she became decidedly worse, the 'cramp and drawings" being more severe.

"*Sept.* 13. I was sent for at 3 P. M. I found her sitting up; said she could not sleep on account of general uneasiness and a disposition to move the arm, which brought on an increase of the symptoms enumerated. On examining the arm, I found it a little, but firmly, flexed; the biceps was contracted, cord-like, and hardened, and somewhat tender upon pressure. Slight rigidity of the muscles of the neck on the affected side, also a feeling of 'tightness' extending from her hand to her head. From the tetanic character of the symptoms, I at once prescribed strychnine in doses of $\frac{1}{16}$ of a grain, in solution, every two hours (when awake) with a sinapism to the biceps.

"*Sept.* 14, 10 A. M. Patient has slept well through the night for the first in some time, arm a little relaxed, otherwise as yesterday; continued the strychnine as above.

"7 P. M. No improvement; ordered $\frac{1}{14}$ of a grain of the strychnine.

"*Sept.* 15, 10 A. M. Patient has slept but little during the night; complains of the 'rigidity, tightness, and drawing' of her arm; her head is drawn down towards the shoulder of the affected side, with inability to extend the jaws to the full extent, and distress over the diaphragm; ordered her to take strychnine $\frac{1}{12}$ of a grain every two hours.

"7 P. M. Has had a few twitches, characteristic of the effects of the strychnine; a little yielding of the tetanic symptoms; continued the strychnine as above.

"*Sept.* 16, 10 A. M. Patient has slept well, general improvement, contracted muscles relaxing; has taken considerable nourishment, having been unable to do so for some days.

"17. Discontinued the strychnine, as the tetanic symptoms have all disappeared.

"From this time forward, the patient continued to mend rapidly, and by the 21st was perfectly well.

"Respectfully yours, &c.,

"Edw. Vanderpool."

N. York, Oct. 1, 1846.

Art. XII.—*Practical Remarks on Abortion.* By Jas. C. Bliss, M. D., *of New York.*

It is not the purpose of this paper to enter into a discussion of the pathology, or to enumerate all the causes that give rise to the premature expulsion of the contents of the impregnated uterus. The writer has not materials for a full exhibition of the phenomena of abortion, which,

from their very nature, involve some of the most abstruse and difficult inquiries in pathological anatomy, and which have but recently engaged the attention of those who have the best opportunities and qualifications for such investigations.

It is intended, in presenting this subject to the reader, to direct his attention to a single point, that, in the opinion of the writer, is of considerable practical importance. It will not be necessary, therefore, to enumerate, elaborately, the causes of this unfortunate occurrence, or enter very minutely into an inquiry, how these causes operate.

The term Abortion, by systematic writers, is applied to the expulsion of the contents of the fecundated uterus, at so early a period, that the independent existence of the fœtus cannot be maintained. This, by some writers, is limited to the fifth month of pregnancy; by others, it is extended to the sixth, and even to the seventh month. After this period, and before the full term of gestation is completed, the expulsion of the fœtus, and its involucre, is called premature delivery.

The distinction, in many respects, is of practical importance, but for the purpose we have in view, it is deemed most proper to class under one general head, all cases of premature extrusion of the contents of the gravid uterus.

Most of the causes which give rise to such a misfortune, may and do occur at any period of pregnancy, and till within a short period of the full development of the fœtus necessarily involve its life.

Miscarriage is of much less frequent occurrence among active and laboring women, except from violence, as falls, blows, &c., than in those in affluent and easy circumstances, who are indolent and accustomed to indulgences. The statistics of still-born children, also, seem to show that these occurrences are more frequent with us than in the larger cities of Europe, which indicates that there are some things in the habits of our females, that predispose them to such misfortunes.

Causes of Abortion.

The following may be enumerated as among the causes of abortion, viz: any interruption in the circulation between the maternal and fœtal portion of the placenta, by which means the fœtus is not properly nourished, or the blood does not undergo those changes, which are essential to the maintenance of the functions of life. It may be occasioned, also, by a cachectic state of the mother, or an impoverished condition of the blood, which does not properly sustain the embryo; and it perishes from not having sufficient nourishment to maintain its growth and vitality. Miscarriage is also occasioned by diseases peculiar to the fœtus, which blight it in its growth, and ultimately destroy its existence. These morbid affections are often, apparently, derived from one or other of the parents. This is especially shown in some of the cases where the habit becomes inveterate, and is connected with a latent venereal taint.

Structural disease of the uterus is another cause of abortion. Fibrous or other tumors, when they exist, occasionally prevent the expansion of the cavity of the organ, and cause a separation of the placenta and hemorrhage: premature expulsive efforts are excited, and result in the delivery of the fœtus before it is fully developed. An irritable state of the uterus, by which it is thrown into action from slight causes, is likewise liable to give rise to premature expulsion of the ovum. In

these cases there appears to be a remarkable impatience of the presence of anything within the cavity of the organ.

Moral causes appear frequently to lead to this misfortune, where this irritability exists, as sudden surprise, fright, excessive joy, anger, &c.

Atrophy of the placenta, by which the circulation between the maternal and fœtal portion is interrupted, is another cause of miscarriage. It likewise occurs, and probably more frequently with us than from any other cause, from hypertrophy of the placenta, apoplexy of the cells of this organ, or an effusion of blood. This phenomenon was noticed by Denman, and more recently it has been referred to by Dr. Robert Lee, who seems to have given it more attention than any obstetric writer whom I have consulted. It is abortion arising from this cause, to which I wish particularly to direct the attention of the reader. Hypertrophy and apoplexy of the placenta, it is believed, are most commonly caused by congestion of the abdominal viscera. This is shown by costiveness and irregular state of the bowels, indigestion, neuralgic pains, red and swollen tongue, irregular circulation, unequal distribution of heat, a bloated, and at times flushed, and again, pale countenance, and a highly excitable state of the nervous system. The uterus, under these circumstances, becomes very irritable, and feels every slight impression; and hence the habit of miscarriage is easily established after it has once occurred.

This condition of the body is also one of the most frequent causes of barrenness, from its being attended with painful, irregular, and profuse menstruation. The uterus in the female is the usual channel through which the morbid plethora of the system is relieved, and when obstructed and sluggish circulation takes place in the abdominal organs, nature seeks relief by frequent and profuse discharges from this organ, as, under other circumstances, relief is obtained from a plethoric and overloaded state of the bloodvessels, by a discharge from the hemorrhoidal vessels, or by a hemorrhage from the nose, or lungs. From my own experience, I am led to believe that this condition of the body, whether it gives rise to apoplexy or hypertrophy of the placenta or not, more frequently occasions miscarriages than all the other causes combined.

Females are particularly liable to obstructed circulation and congestion of the organs concerned in digestion and assimilation, from their sedentary habits, confinement, and want of proper exercise in the open air; the too free use of animal and other stimulating aliment, and tea and coffee, and vinous, fermented, and spirituous drinks. Another most frequent cause of these difficulties with us is the excessive use of indigestible aliment; the most common of which are those articles into the composition of which saccharine matter enters largely, and the various forms of warm or fresh bread-stuffs, which are so abundantly used in the community. The constant presence of these substances in the stomach gives rise to morbid action in this and the abdominal organs, and not only lays the foundation of the evils of which we are treating, but of many others. The viscera, which under these circumstances suffer, being supplied with nervous influence from the ganglia of the great sympathetic nerve, a highly excitable state of the nervous system is developed, rendering the individual susceptible to every moral and physical impression, which is again promptly conveyed back to the original seat of disease, giving new character and force to the morbid action with which these organs are affected.

In these disordered actions the uterine system becomes involved, and

in many cases exquisitely sensitive, and hence impatient of every stimulus, and is thrown into unnatural excitement from very slight causes, and especially by the presence of the ovum after conception. An undue determination of blood takes place to the uterus, and its appendages; the involucra of the embryo is gorged with blood, partial detachment takes place, hemorrhage follows. The uterus is excited into action, and the contents are expelled.

A morbid condition of the uterus depending upon disordered state of the digestive apparatus, is a frequent cause of barrenness in married females; and we are daily called upon to prescribe for unmarried females who are suffering from too frequent, profuse, or painful menstruation, connected with a crowded state of the bloodvessels of the digestive organs, and consequent derangement in their functions.

Treatment of Abortion.

Prevention.—I have been accustomed for a long time to treat this difficulty with a good share of success, on principles founded upon the above view of its causes.

One of the remedies relied upon has been blood-letting, carried to the extent of relieving the embarrassed circulation. This has been practised early after conception has taken place, and repeated as circumstances and the condition of the patient seemed to require. The secretions from the bowels have been kept free by mild, aperient medicines, as castor oil, magnesia, pills of rhubarb, soap, and soda, or by the natural or artificial mineral waters. The latter in many instances have been found particularly beneficial in their gentle effect in promoting the secretions, equalizing the circulation, and invigorating the digestive functions. If administered at an early hour in the morning, on an empty stomach, an hour or two before rising, they, in general, will not disagree. If they should occasion flatulence, pain, uneasy or discontented state of the bowels, they should not be persisted in. In some instances, all kinds of laxative medicines irritate the bowels, and in these cases they may be kept free by injections of cold water, or mixed milk and water. If these prove insufficient, the irritation occasioned by laxative medicines may generally be allayed by combining them with conium, or hyosciamus. The shower-bath, or cold dash, in cases where it is followed with re-action, and a glow on the surface, has been practised with great advantage. Where re-action does not take place readily after cold bathing, the tepid bath can be substituted with advantage. To bathing should be conjoined frictions with the flesh-brush, and other remedies to excite determination to the peripheria of the circulating system, and thus relieve the overloaded vessels of the internal organs. Care should especially be taken to maintain warmth and circulation in the lower extremities, from the direct and immediate sympathy such irregularity has with the functions of the womb.

The patient should be directed food which is light, and easy of digestion, and cautioned against all stimulating drinks, and irritating and indigestible aliment. She should be directed to retire to rest early, to be regular in all her habits, and avoid everything bordering on excess. Moderate exercise in the open air will be found of great importance, and almost indispensable. Carriage-riding, in general, will be preferable to

horseback exercise, or walking; at least this will be found the case with females of the habits prevalent in our large towns.*

It is a matter of great importance that the patient should preserve a perfectly equable state of mind, and avoid all those moral causes which may give a sudden shock to the nervous system, and what is sure to be conveyed to the uterus, and excite unnatural action in that organ. The importance of the patient exercising a perfect control over the moral susceptibilities cannot be too strongly insisted upon, as every day's experience shows that strong impressions made upon the mind are among the most frequent exciting causes of miscarriage.

Threatened Abortion.

When the uterus is thrown into action with or without a sanguineous discharge.—In a large proportion of cases the threatened danger is to be treated by blood-letting, which should not be omitted unless there are strong reasons for not producing it. The patient should be confined to a horizontal position, kept perfectly quiet, and directed to avoid heated or stimulating drinks, and confined to low diet. After blood-letting great benefit is derived in quieting the action of the uterus by the exhibition of opiates. An anodyne enema or suppository has advantages over the preparations of opium given in any other way. This manner of using the remedy is especially to be preferred where there is strong bearing down pains, or where opium disagrees, as it frequently does, with the stomach, or where it is liable to create material disturbance of the nervous system. After the action of the uterus is quieted, and the hemorrhage, if it exists, checked, the patient should be cautioned against returning too suddenly to the habits of health, which should be resumed very gradually and cautiously, lest untoward symptoms should be again expected.

Hemorrhage after the expulsion of the fœtus.—It often happens that flooding continues after the expulsion of the embryo or fœtus. Sometimes it will occur for days, and even weeks, and the patient become reduced to an extreme degree of weakness and exhaustion. Sudden, profuse, and alarming hemorrhage occasionally happens immediately after the escape of the fœtus, or at a period more remote, and sometimes it will continue to recur again and again; the patient will swoon and apparently be in jeopardy of life. In most of these cases the discharge is produced and kept up by the detached placenta or by a portion of it, or by coagula lodged in the mouth of the uterus, which if removed as it generally can be by the fingers, the flooding will immediately cease. I have never known the removal of the offending body lodged in the mouth of the womb, fail of arresting the hemorrhage, even when a portion of the placenta still remained in the uterus, which is often the case where miscarriage takes place in the early period of pregnancy.

Treatment after Abortion.

In general there is too little attention paid to females after an occurrence of this nature, and they are themselves very often extremely reckless and unwilling to submit to the restraints imposed upon them by their

* This perhaps will not be found true with ladies in Great Britain, who are accustomed to walk for exercise much more than those of this country.

medical attendants. Persons who have the state of system before described require to be managed with as much care and prudence after miscarriage as after delivery at the full period of gestation. They should be kept in a state of quiet and repose, and the same precautions taken to prevent unfavorable occurrences as in lying in. In many instances premature exertions, particularly a long walk, going up and down stairs, being much upon the feet, or mental excitement, have been followed by most unpleasant consequences, such as long continued weakness of the uterus and its appendages, menorrhagia, hysteralgia, irritability and chronic inflammation of the organ. From having seen these consequences repeatedly ensue, I have been accustomed to urge upon my patient the same precautions and care as after confinement at the full period, and where the advice has been followed the result has confirmed the wisdom of the course.

PART SECOND.

Critical Analysis.

ART. XIII.—*Scrofula; its Nature, its Causes, its Prevalence, and the Principles of Treatment.* By BENJAMIN PHILIPS, F. R. S., etc., Phil. Lea & Blanchard, 8vo., pp. 350.

(Continued from p. 252.)

As to predisposition, we cannot at present say in what it consists, nor even indicate the characteristic signs, except those constituted by organic or functional changes, which show the actual existence of the disease. Its existence may probably be real, but it has no positive or constant external signs, by which its existence may be made known.

The question has arisen, whether the existence of any other disease in the parent is capable of developing scrofula in the offspring. The result of investigations on this point shows, that a feeble constitution is a favorable, though not a necessary or indispensable condition for the development of the tuberculous cachexia; that a feeble constitution is more likely to be the offspring of diseased than healthy parents; but that we cannot point out the causes in the parent which tend most to entail feebleness upon the child, nor what kind of disease or feebleness in the parent tends most to induce the development of scrofula in the child.

It has been maintained by many writers, as Camper, Hall, Portal, Hufeland, Alibert, &c., that a syphilitic taint in the parent tends to produce scrofula in the child; but it is well known that these diseases are independent of each other—that scrofula is rife where syphilis is rare. Syphilis affects all periods of life, scrofula is more confined to a particular period. Hereditary syphilis is manifested at, or soon after birth; scrofula rarely before the second or third year. Syphilis is rarely cured spontaneously; scrofula often disappears at the age of puberty. And lastly, syphilis usually yields to mercurial treatment; scrofula does not.

Mr. P. doubts whether conception happening during menstruation tends to produce scrofula in the child, or that the age of parents influences the development of the disease in the offspring, except that the children born of parents advanced in life are likely to have less vigor of constitution, and therefore more liable to be unfavorably affected if exposed to those causes that generally produce scrofula.

Too frequent intermarriages—"marrying in-and-in"—has been supposed to favor the production of scrofula. Mr. Carmichael cautions

against frequent and close intermarriages; "for," says he, "they are generally followed by a puny race, and scrofula, in one shape or another, seems to be the punishment inflicted for this breach of the organic laws. Hence the more frequent occurrence of this disease amongst the privileged orders of society," &c. Mr. P., however, doubts whether we have any clear evidences of the bad consequences either on the mind or the body, of frequent intermarriages. In proof of his position, he alludes to the inhabitants of the Isles of Portland, Man, and the Channel Islands, to the Jews and Quakers, all of whom marry within a narrow circle; and his conclusion is, that intermarriages among healthy persons tend to no such result as the production of scrofula, although it may lead to other bad physical consequences.

It is still a mooted point, whether the milk of a scrofulous nurse tends to produce scrofula in the child. Mr. P. thinks we have no evidence in favor of such a belief, although he says he would be unwilling to have a child of his own suckled by a scrofulous nurse. But if we have no proof to show that the disease may be propagated in this way, we certainly have none to show that it cannot. It is, therefore, the part of wisdom to follow the safer course, and avoid scrofulous nurses. As to the effects of menstruation, M. Raciborski has shown that it does not exercise any influence upon the number or the size of the milk globules. The reaction of milk continues to be alkaline during the whole time of the menstrual evacuation. The only sensible modification that the milk seems to experience under the influence of menstruation, consists in the diminution of the quantity of cream. It is to this peculiarity also, that we must attribute the bluish aspect which milk presents in women at the menstrual period. This modification does not, however, seem to exercise any injurious influence on the health of the child.

Mr. P. also arrives at the following conclusions, viz:—

1. There is no proof that any form of contact or inoculation exercises any influence in the production of scrofula.

2. The development of scrofula is not known to be so influenced by climate or temperature, as to bear any definite relation to the warmth or coldness of the country in which the disease is found.

3. Neither the general mortality, nor the deaths from scrofulous diseases, bear any definite relation to the closeness with which the population is crowded together, whether the comparison is made between one town or district and another, or between different portions of the same town or district

4. Particular occupations and social conditions exercise a greater influence on health and the duration of life, than is produced by impure air or insufficient ventilation, but they do not operate in the production of scrofula, in the sense of a specific agent, or of a direct cause.

5. The general mortality and the deaths from particular diseases bear a close relation to the poverty of the population, and to the vicissitudes or alternations of prosperity or adversity to which they may be exposed; whilst wealth and station, which insure to the more elevated classes of the community abundant food, ample clothing, convenient and well-ventilated dwellings, and pure air, are nevertheless unfavorable to longevity; and the industrious laborer, whose toil insures steady remuneration, and whose temperate habits and pro-

vident character insure him the necessaries of life, good of their kind and ample in quantity, is in the condition the most favorable to long life and uninterrupted health.*

6. *Diseased nutrition* is the general cause of that condition of the system, called scrofula, but it originates in various agencies, either acting separately or associated together. Thus the inheritor of a feeble frame may owe to that circumstance an impaired digestion, however carefully he may be reared, or his food be adapted to his condition. His occupation may have been so long continued, or of such a character; or impure air may have been so constantly respired, as in either case to derange the digestive functions; or, if no one of these agencies shall, in itself, have been sufficiently active to induce the disease, they may have been associated together, and so impaired the functions of digestion, as to lay the foundation of scrofula; even, perhaps, in cases where the food has been abundant in quality, and judicious in kind. But the cause of diseased nutrition at that period of life, when the seeds of scrofula are sown, is, in the vast majority of cases, insufficient food, or improper feeding; and that these stand to the disease, in the relation of cause, is shown by the fact, that wherever food is abundant in quantity, and of a good quality, there scrofula is rare; and wherever the reverse holds good, there the disease abounds. It is well known that those who live almost exclusively on *vegetable food*, are less robust, and exhibit a greater tendency to scrofula than those who subsist on a mixed diet of animal and vegetable food. We attempted to show in former numbers of this Journal (on dietaries), that the great cause of scrofula in our orphan asylums, and at the Long Island Farms, was the want of a sufficient quantity of animal food; and further observation and experience have confirmed us in this opinion. The bread and meat that are furnished, are of too coarse a quality, and by no means adapted to the delicate digestive organs of the young inmates. Their school and sleeping rooms, moreover, are badly ventilated; and if to these are added a want of proper exercise, we shall not wonder that more than half the entire number exhibit marks of scrofulous disease. One of the great, if not the most influential cause of scrofula in this city, is the use of milk of cows fed on distillery slops, and confined in close stables. Under these circumstances, nearly, if not all the animals, become diseased, generally tubercular; the milk undergoes important changes in its composition—its specific gravity is lessened; instead of alkaline, it becomes *acid*, and the amount of oil and caseine is about one-third of the usual quantity in healthy cows, fed on grass and other natural food. The nutrient properties of milk depend chiefly on oil and albumen, but there is so little of these in slop-milk, that it is incapable of making butter or cheese. Now, when we consider that nearly three-fourths of the children born in this city, are sustained wholly, or in part, on artificial diet, in which distillery slop-milk often forms a considerable portion, we shall cease to

* One very remarkable result of Mr. P.'s investigations is, that children employed in factories are far less disposed to scrofula than those residing in rural and agricultural districts. Thus, of 401 children examined in one factory, 8 only were found exhibiting signs of scrofula; in another employing 504, 6 were affected; in 234 in another, 5; in 337 in another, 4; in 199 in another factory, 3: thus giving but 26 children out of 1475 of this class who were scrofulous. Of 5754 factory children, examined by Messrs. Homer and Saunders, 905, or 13 1-2 per cent., had marks of scrofula.

wonder that scrofula is so frequent a disease among the lower and middle classes of our population. We do not agree with Mr. P., that the advantages to the health of the community, which have been held forth as the result of improved drainage and ventilation, have been exaggerated; but we hold to the opinion, which he has also expressed, that impure air and stagnant filth are noxious agencies, and that the dwellers in our crowded thoroughfares will be benefited by their removal. We believe, moreover, that there are, among manufacturing operatives, agencies at work in deteriorating the health, no less influential than bad air, and innutritious food; such as great alternations of prosperity and adversity; sudden and extreme vicissitudes; large earnings to-day, succeeded by half or no work to-morrow; uncertainty of occupation; irregular habits and intemperance.

Treatment of Scrofula.—To prevent or cure scrofula, is the practical object of all our investigations upon the nature of the disease, and as prevention is better than cure, let us inquire how this may be done, if indeed it be possible.

And first, may be mentioned, *well assorted marriages,* that is, those contracted by parties in health and vigor; as their offspring are far more likely to be sound and healthy than the offspring of diseased and debilitated parents. As tight lacing interferes with the healthy discharge of the most important vital functions, and necessarily endangers the health of the offspring, it should be regarded as one of the most prolific causes of scrofula, and therefore sedulously avoided.

In the next place, the first food of a child should be derived from the breast of a healthy woman. In our cities but few mothers, as has already been remarked, wholly nurse their infants; consequently, they provide more or less artificial food, which is often of an unsuitable nature, as bread, crackers, flour, and cow's milk. When we compare the composition of the latter with that of human milk, we find it very unlike the child's natural food; for example, cow's milk has in it, of

Caseine,	4.48 to 8.95
Butter,	2.68 to 3.13
Sugar of Milk,	4.77 to 5.68
Water,	84.69 to 87.02

While that of woman contains of

Caseine,	1.82 to 1.95
Butter	3.55 to 8.97
Sugar of Milk,	1.20 to 6.50
Water,	82.90 to 87.98

Thus, if we dilute cow's milk, which, though richer in some materials than woman's milk, is it still poorer in others, we may reduce one element to its proper standard, but we have another below it, so that it is after all very dissimilar. Besides it usually happens that many cows concur to furnish food for a single child, which is more apt to disagree than the milk of a single cow; and then, probably, several hours have elapsed before the child gets the milk, so that it has undergone a separation into several parts, and is no longer a homogeneous fluid, like that drawn from the mother's breast; or, previous to use, it has undergone sufficient heat to coagulate the albumen, and thus rendered more difficult of assimilation. But if the milk has been obtained from cows

shut up in close, filthy stables, and fed on distillery slops, it is a rank poison, and a great portion of the milk, used in this city, is still of that description. Again, if the milk itself, or whatever the food is, be unexceptionable, the mode of taking it is usually objectionable. The nearer the food can be assimilated to the act of sucking, the better, because the act of drawing the food from the woman's breast causes a pressure upon and an excitement of the salivary glands of the child; saliva then flows into the mouth, and is mixed with the food, which is thereby rendered more fit for the process of digestion; unless that effect accompany artificial feeding, one of the essentials of proper nutrition is not accomplished—a nursing bottle with a cow's teat or one of India rubber attached is far preferable, therefore, to feeding from a spoon. Again, the mother's milk undergoes changes from month to month; the caseine increases, and the sugar diminishes, so that the milk, which might be proper at the early period, would not be equally proper at the later one. Besides, the natural food of the child is very quickly assimilated, and soon passes rapidly out of the stomach, so that frequent feeding is necessary; if this be neglected, the stomach gets irritated, and nutrition is deranged. The cutting of teeth is nature's indication that food of a more substantial and animalized kind is needed. It would be absurd to attempt to frame a universal standard of food, as what is best under one train of circumstances, may be far from best under another; climate, and other agencies require judicious changes in diet and render particular modifications proper. We agree with Mr. P., that man's organization makes it evident, that his economy is adapted for the assimilation of animal food, and it seems in the highest degree irrational and absurd to maintain, that animalized food (milk) is necessary during the first year of life, when the calls upon the child's system are certainly not greater than they are in the subsequent three or four years of life, while in the succeeding period, rice, or potatoes, or bread, are his proper food. There is no greater physical curse than Grahamism, fully carried out—as soon, then, as the child is weaned, it should have a due proportion of animal and vegetable food; the proportion, of course, varying with the individual and with surrounding circumstances. It is not, however, sufficient to insure a healthy constitution, that the stomach should be supplied with appropriate nourishment, the lungs should be furnished with good air, both by day and by night; no matter what the food may be, health cannot be ensured unless it be properly assimilated, by undergoing the necessary changes in the lungs; and these changes cannot take place, without a suitable supply of oxygen; or there may be poisonous emanations, as the sulphuretted and carbonated hydrogen gas of cities, disseminated through it. This air, then, for the young, must be pure, and it must be freely supplied, and not only so, but after ensuring pure blood, by good food and good air, we must employ means to make it circulate through the body with necessary vigor. In other words, active exercise is necessary; good food, good air, good exercise, these, then, are the essentials of good health—the great preventives of that proteiform disease, that we call Scrofula.

The *curative treatment* of scrofula is still involved in great doubt and difficulty. Physicians have, in early ages, been seeking for *specifics* for its use, and yet we have reached the middle of the 19th century and no such medicine has yet been found. *Touching* for the disease was prac-

tised by the kings of England, as far back as the time of Edward the Confessor, 1041. This prince is recorded to have cured 182 persons. The gift of healing was a privilege claimed to belong to the kings of England from time immemorial, and was attributed by many to the anointing their hands received at the time of the coronation. Brown tells us Cromwell tried, in vain, to exercise this royal prerogative; "he having no more right to the healing power, than he had to the royal jurisdiction." In the time of Charles II. the belief in the efficacy of this practice was universal, 92,107 persons having been "touched" by the king in 12 years. It seems that a small bit of gold was given to all who were touched, and this accounts, perhaps, for the extraordinary number, without supposing that all really were afflicted with the disease. One of the very last persons "touched," was the celebrated Dr. Johnson by Queen Anne, 30th March, 1714; on the 1st of August ensuing she died, and the ceremony has been discontinued since the accession of the House of Brunswick.

Strange as it may seem, the practice was followed by very frequent and astonishing cures. Wiseman and Brown, who wrote on the disease, and were contemporaries with Charles II., speak of numerous cures of which they were eye-witnesses. Wiseman holds this language: "His majesty cureth more in any one year than all the chirurgeons of London have done in an age." Again he says: "I myself have been a frequent eye-witness of many hundreds of cures performed by his majesty's touch alone, without any assistance of chirurgery, and those many of them such as had tried out the endeavors of able chirurgeons before they came thither. It were endless to recite what I myself have seen, and what I receive acknowledgments of by letter, not only from the several parts of this nation, but also from Ireland, Scotland, Jersey, and Guernsey." When we consider that the ceremony was accompanied with a religious ritual, which was calculated to make a strong impression on the imagination of the patient, and increase his confidence in the means employed, we shall not be surprised to learn that many cures resulted from the practice. May it not have been owing to the same cause that *viper's flesh*, the *scorpion*, the *lizard*, the *touch of the dead felon's hand*, *drinking out of human skulls*, &c., all of which have been formerly employed for the cure of scrofula, acquired a degree of reputation, and were apparently influential in dispelling the disease. Galen tells us that "confidence and hope do more good than physic, and he cures most, who but acquires and retains the patient's steadfast confidence." Hahnemann well understood this principle, and Dr. Schubert, his intimate riend, tells us that he (H.) "always promised a cure," and that "this was done to secure the unlimited confidence of his patient." "He then dosed them with sugar of milk and restricted their diet." It should, however, be recollected, with regard to scrofulous patients, who suffer from enlarged glands in the neck, a large proportion get well under almost any rational plan of treatment.

The remedies, whose virtues in the treatment of this disease are discussed by Mr. P., are mercury, iodine, muriates of baryta and lime, burnt sponge, alkalies, cod-liver oil, sea side influences and season, and general plans of treatment.

With respect to *mercury*, Mr. P. thinks that under ordinary circumstances it is incapable of curing scrofula, or removing it from the constitution, but that it may be usefully employed, associated with other

medicines, according to the symptoms of the disease. He thinks that the *bichloride of mercury* given in minute doses, as the $\frac{1}{10}$th of a grain twice a day, with sarsaparilla, will not yield in efficacy to iodine, baryta, or other medicines which at present enjoy a more extensive reputation. Its influence is always injurious when given so as to lower the general powers, whether by profuse purgation, or by salivation.

There is no remedy which enjoys so high a reputation in scrofulous affections as *iodine*, and yet we agree with Mr. P. that it is no specific in the disease, and that unless other influences are brought to bear at the same time, it will rarely serve to eradicate the scrofulous taint. The praises which Lugol bestowed upon it were extorted by the recovery of 35 out of 109 cases in which it had been used; and yet Mr. P. tells us that an equal number will recover under no other treatment than good food, good air, suitable clothing and proper exercise. These, however, are but little regarded by the believers in the specific virtues of medicines, as the homœopaths;—always to be used, but never to enjoy the least credit. Who ever knew a disciple of Hahnemann willing to divide the credit of a cure between hygienic measures, general regimen, and his infinitesimals? No one. Mr. Baudelocque says that he cured 15 out of 67 scrofulous girls by iodine, and relieved 14; of the 67 cases, 17 had only enlarged glands; in 16 there was abscess; of these, 8 were cured; of 30 cases of caries, 4 were cured. Mr. P. thinks, however, that iodine is sometimes useful in scrofula, not from its exerting any specific action, but by its general alterative effects; under its use we see the tongue become cleaner, the appetite improve, and the secretions acquire a healthier character. It probably, as Mr. P. suggests, has the power of occasionally modifying the mucous surfaces so as to enable them to assist in producing healthy nutrition. The best form of administering it is the *iodide of iron*, and it is probable that as much benefit is owing to the iron as to the iodine. Four grains in 24 hours, in the form of a syrup, given for two or three weeks at a time, then omitted for a while, and again resumed, is the most successful mode of employing it. The simple tincture should not be used, as it is so quickly decomposed when poured into water. The iodide of potash, from its great solubility, and from its sitting well on the stomach, is an excellent form in many cases, but where there is great debility and irritability, the iodide of iron is the best combination. In these cases it seems to have a sedative influence upon the organism, rendering the pulse fuller and stronger, while it improves the general tone of the system. But in this, as well as many other cases, we lose sight of much that is important in the cure of disease. Many complaints are self-limited; they tend to recovery in a given time; many are influenced by season; many by place or locality. We all bring other important agencies to bear in the treatment of our patients; we prescribe their drinks, their diet, their dress; we direct as to the temperature of their room; we see that it is well ventilated; we remove all noise and other noxious agencies; we endeavor to calm the mind, to soothe all agitation, and remove all causes of mental disquietude; we try to procure sleep; we direct perfect cleanliness, both of and around the patient; we employ baths and frequent ablutions; in addition to all, we give medicine; the patient recovers; *ergo*, that medicine, whatever it be, has cured him, it is henceforth a specific. In the treatment and cure of scrofula, it is difficult to say how much credit is due to the medicine, and how much to our general hygienic measures.

Barium has enjoyed considerable reputation in the treatment of scrofula, and Mr. P. thinks that its powers as a discutient, over scrofulous glandular tumors and the scrofulous constitution, are little, if at all inferior to those of iodine. Its field of usefulness, however, is more limited, as we have but one preparation of the medicine. As it is more irritating than iodine, its use is contra-indicated where there is much inflammatory excitability of the system; but where there is a flabby tongue and languid circulation, accompanied by irritability of the mucous surfaces, barium is often very useful. It may be given in solution; j. gr. to ʒj. of water, with ten drops of compound tinct. of gentian; of this ʒss. twice a day may be given. Baudelocque speaks highly of its external use as a discutient to glandular tumor in the proportion of ʒj. to ʒj. of lard.

Hydrochlorate of lime (muriate) has similar properties in relation to scrofula with those possessed by the chloride of barium, except that it is more irritating, and therefore requires to be used with more caution. It may be given in the following form: ʒj. to ʒxx. of distilled water, of which a teaspoonful may be taken in milk two or three times a day. It does not seem to have any decided action on scrofulous glands.

Alkalies have long enjoyed considerable popularity in the treatment of scrofulous diseases, especially the caustic potash. The celebrated anti-scrofulous elixir, which had the reputation of curing this disease for more than 100 years, was nothing more than 7 grs. of carbonate of potash, to ʒj. of water. Where there is great acidity of the secretions, alkalies, we believe, will be found very useful remedies in scrofula, but they have no specific power over the disease.

Burnt sponge, the virtues of which, if it had any, were supposed to be owing to iodine, has long since gone out of use, and cod-liver oil has taken its place. Mr. P. states that he has employed this article very extensively in the treatment of scrofula, and that his estimate of its virtues as a remedial agent is much less favorable than that of many others who have given it a trial. He adds, however, that there is scarcely any form of scrofula which he has not seen improve under it; enlarged glands, sinuses, ulcers, lupus-like scrofula of the face, caries—all these he has known get better under its employment; but generally one of two things happened, either the stomach or the patience failed, before the remedy had been carried far enough to produce any considerable amelioration. We have generally found the stomach to fail before we had fairly begun its use. As cod-liver oil has been found to contain bromine and iodine, its virtues have been attributed to these agents, but when we reflect that their quantity is not more than the forty-thousandth part, we are compelled to relinquish this theory. We have quite as much faith, and rather more, in good, fat, salt bacon, and prescribe it far oftener in scrofulous cases.

Sea-water taken internally, is a very ancient remedy in scrofula, being mentioned by Pliny and Celsus. It has, however, gone pretty much out of use, although sea-bathing is still resorted to as a powerful remedy in correcting the scrofulous diathesis. It exercises upon the surface of the body a powerful tonic influence; it improves digestion and respiration; gives more vigor to the constitution, and in this way improves nutrition—it gives a preponderance to the arterial over the venous and lymphatic systems, and thus gives to the body generally a power to resist successfully the inroads of many chronic diseases. These effects are partly due to the cold, and partly to the stimulating influence of the

salt upon the cutaneous surface. We believe that a residence at the sea-side during the months of July, August, and September, and the daily practice of salt-water bathing, and a regulated regimen, will do more in the cure of scrofula than all other hygienic or remedial agents whatever; and yet, strange as it may seem, those who habitually reside at the sea-side are not more free from scrofula than those who live inland, and when affected with scrofula, they derive as much benefit from inland change, as is experienced by inland patients from a change to the sea-side.

Mr. P. doubts whether *mineral waters* exert any very decided curative influence over this disease, although he thinks that mineral water is lighter, more penetrating, and more easily digested than common water. There can be no doubt, we think, that mineral waters exert a curative power over the organism, independent of accessory circumstances, and also, that particular virtues attach to particular waters, according to their composition. Thus the sulphurous waters act particularly upon the lymphatic and tegumentary system; the saline upon the digestive tube; the alkaline upon the fluids; the ferruginous upon the solids. No fact can be better settled than that alkaline waters, holding a small quantity of soda or potash in solution, or ferruginous waters, containing small quantities of iron, will cure diseases which have resisted all sorts of alkaline or ferruginous medicines when otherwise administered; substances taken from nature's laboratory possess an energy which those of art can never attain. Mineral waters, then, are not to be neglected in the treatment of scrofulous affections.

Mr. P. thinks that *season* has more influence in the cure of scrofula than any other agent except food. Scrofulous affections are least numerous and most manageable during the autumn months, and most severe and aggravated in spring and the beginning of summer. Our estimate, then, of every plan of treatment will be defective, which does not include the influence of season.

If, then, we have a scrofulous patient to heal, especially a child, marked by general debility, and the presence of glandular tumors in the neck, we should direct a change of residence, if practicable, and a dry, warm, locality, favorable for exercise, is best. The food should be nutritious, and of a mixed nature—fluid or sloppy diet to be avoided. As much exercise should be taken as possible without fatigue; the sleeping-room should be airy, and the surface of the body well rubbed with flannel before the child is dressed.

If the tongue is furred, the appetite bad, and digestion impaired, an occasional emetic will be useful. If there is a want of bile in the evacuations, the stools being clay-colored, calomel or blue pill, with rhubarb, will be proper. If there is great torpor of the bowels warm purgatives, and if the secretions are preternaturally acid, alkalies, with bitters, will be indicated. If there is great want of tone in the digestive mucous surface, wine, ale, bark, iron, iodine or mercury, assisted perhaps by alkalies, will be necessary—the choice to be determined by the circumstances of the case. Where the surface is pale, the texture flabby, the circulation languid, iron or bark will be the proper remedies; if the general health has not greatly suffered, mercury or iodine will be proper. Where scrofulous matter has been deposited, it will not be absorbed—it may remain dormant, or it may excite inflammation, and

suppuration be established, when the matter will be discharged externally. We should anticipate the discharge by opening the integument with a cutting instrument; or, if the integument be thin, and of a violet color, with the caustic, which in such a case occasions less deformity. But unless ulceration be inevitable, the surgeon should not interfere with either. Where there are local signs of inflammatory action, as manifested by pain, heat, and redness, we may treat it like common phlegmon, by cold and leeching; but where the tumor is more chronic, frictions with mercurial or iodine ointment will be best. If change of air, good food and exercise cannot be procured, the difficulty of treatment will be ten-fold enhanced, and the chances of cure infinitely lessened. They all seem necessary to effect such a change in the system as will eradicate the scrofulous taint, and without them medicine is nearly useless. We may, to a certain extent, improve the general health, correct the diseased conditions of the mucous surfaces and the blood by alteratives and tonics, but we cannot very often expect to perform a radical cure.

Art. XIV.—*General Therapeutics and Materia Medica.* With 120 illustrations. Adapted for a Medical Text-Book. By Robley Dunglison, M. D., Prof. of Institutes of Medicine, etc., in Jefferson Medical College. 3d Edition, revised and improved. In 2 vols. 8vo., pp. 504, 482. Lea & Blanchard. 1846.

This is a revised and improved edition of the author's celebrated book, entitled "General Therapeutics;" an account of the different articles of the Materia Medica having been incorporated with it. The work has, in fact, been entirely remodelled, so that it is now the most complete and satisfactory exponent of the existing state of therapeutical science, within the moderate limits of a text-book, of any hitherto published. What gives the work a superior value, in our judgment, is the happy blending of therapeutics and materia medica as they are, or ought to be taught in all our medical schools; going no farther into the nature and commercial history of drugs, than is indispensable for the medical student. This gives to the treatise a clinical and practical character, calculated to benefit in the highest degree, both students and practitioners. We shall adopt it as a text-book for our classes, while pursuing this branch of medicine, and shall be happy to learn that it has been adopted as such, in all of our medical institutions.

Art. XV.—*Human Physiology.* With 368 Illustrations. By Robley Dunglison, M. D., etc. 6th Edition, greatly improved. In 2 vols. 8vo., pp. 651, 694. Phil. Lea & Blanchard. 1846.

The "Human Physiology" of Prof. Dunglison has long since taken rank as one of the medical classics in our language. Edition after edition has been issued, each more perfect than the last, till now we have the sixth, with upwards of 70 new illustrations. To say that it is by far the best text-book of physiology ever published in this country, is but echoing the general voice of the profession. It is simple and concise in style, clear in illustration, and altogether on a level with the existing advanced state of physiological science. The additions to the present Edition are extremely numerous and valuable; scarcely a fact worth naming, which

has a bearing upon the subject seems to have been omitted. All the recent writers on Physiology, both in the French, German and English languages, have been consulted and freely used, and the facts lately revealed through the agency of organic chemistry and the microscope have received a due share of attention. As it is, we cordially recommend the work as in the highest degree indispensable both to students and practitioners of medicine.

ART. XVI.—*The Elements of Materia Medica and Therapeutics.* By JONATHAN PEREIRA, F. R. S., etc. With numerous illustrations. 2d Am. from the last Lond. Edit. With notes and illustrations by Joseph Carson, M. D., etc. 2 vols. 8vo. Lea & Blanchard, Philadelphia. 1846.

THIS *encyclopedia* of Materia Medica, for such it may justly be entitled, gives the fullest and most ample exposition of Materia Medica and its associate branches, of any work hitherto published in the English language. It abounds in research and erudition: its statements of facts are clear and methodically arranged, while its therapeutical explanations are philosophical, and in accordance with sound clinical experience. It is equally adapted as a text-book for students, or a work of reference for the advanced practitioner, and no one can consult its pages without profit. The Editor has performed his task with much ability and judgment. In the first American edition, he adopted the Pharmacopœia of the United States, and the formula set forth in that standard authority: in the present, he has introduced an account of substances that have recently attracted attention by their therapeutic employment, together with the mode of forming the characters and uses of new pharmaceutic preparations, and the details of more elaborate and particular chemical investigations, with respect to the nature of previously known and already described elementary principles—all the important indigenous medicines of the United States heretofore known, are also described. The work, however, is too well known to need any further remark. We have no doubt it will have a circulation commensurate with its extraordinary merits.

ART. XVII.—*The United States Dissector, or Lessons in Practical Anatomy.* By WM. E. HORNER, M. D., Professor of Anatomy in the University of Pennsylvania. Edited by H. H. Smith, M. D., etc. Phila.: Lea & Blanchard. 12mo., pp. 444. 1846.

THIS well known work of Professor Horner has now been twenty-three years before the profession, and its merits universally appreciated and acknowledged. Indeed, under the unassuming title of "Lessons in Practical Anatomy," it was the first original American manual devoted to the purposes of the dissecting room. Since its first appearance it has been in constant demand, and no work, it is believed, has proved more useful in aiding the student in acquiring a knowledge of this important branch of his profession. The present edition is much superior to any of the former, on account of its numerous well-executed plates, so important in calling to mind the relative situation of parts, long after opportunity of dissection has been permitted. The introductory part, giving an account of the mode of dissecting, of anatomical preparations, setting scalpels, injections of various kinds, modes of preserving subjects for dissection, dried preparations, corroded preparations, wet preparations, quicksilver injections, preparing bones, fumigation, precautionary measures against dissecting wounds, &c., embody an amount of useful practical information, which may be sought for in vain elsewhere, and which is worth far more than double the price of the book.

ART. XVIII.—*Adulterations of various Substances used in Medicine and the Arts, with the means of detecting them; intended as a Manual for the Physician, the Apothecary, and the Artisan.* By LEWIS C. BECK, M. D., Professor of Chemistry in Rutger's College, New Jersey, and in the Albany Medical College, &c. 12mo. pp. 331.—New York: S. S. & W. Wood, 261 Pearl St. 1846.

THE work, whose title we have given, supplies a desideratum long experienced by the physician and the apothecary, as well as the public generally. It freely exhibits the adulterations of various substances used in medicine and the arts, and describes the processes by which they may be detected; and these are generally simple, and such as may be readily followed by those not much versed in chemistry. The importance of such a work, when we consider the extent to which adulterations are now carried in medicine, is too obvious to need remark. The articles are arranged alphabetically, and the names of medicinal articles, as employed by U. S. PHARMACOPŒIA, are given. The appendix contains full descriptions of the various chemical operations noticed in the body of the work, directions for the preparation of re-agents, and several tables exhibiting the behavior of some re-agents, with the more important substances.

As to the manner in which the work is executed, we can speak in terms of unqualified praise. Indeed, the scientific reputation of the author is a sufficient guarantee for the character of any work which he may put forth. We have no doubt that the treatise will have a wide circulation, for we think no physician or apothecary, at the present day, can well be without it.

ART. XIX.—*A Text Book on Chemistry for the use of Schools and Colleges.* By JOHN WILLIAM DRAPER, M.D., Professor of Chemistry in the University of New York, etc. With 300 Illustrations. Harper & Brothers. 12mo., pp. 408.

THIS work is well adapted as a text-book for schools, colleges, and other institutions. It appears, moreover, just at the time it was wanted, namely, as the different medical schools are about commencing their annual courses of lectures. The work contains the outline of the course of Lectures delivered by the author in the Medical Department of the New York University, to which are appended, at the bottom of the page, leading questions on all the important topics treated of. As a manual for students, setting forth in plain language the great features of the science, and arranged in such divisions as the experience of many years has shown to be most suitable for daily instruction, we can commend the work as one of the best with which we are acquainted. The wood cuts will convey to the student a clear idea of the practical part of each lecture, a consideration of no little importance, where access to a complete chemical apparatus is wanting. We hope the work will have an extensive circulation.

ART. XX.—*Anatomical Description of the Diseases of the Organs of Circulation and Respiration.* By CHARLES EWALD HASSE, M.D., etc. Translated and Edited by W. E. SWAINE, M.D., etc. Philadelphia: Lea & Blanchard. 8vo., pp. 377. 1846.

THIS is a reprint of one of the valuable works issued by the Sydenham Society, and one of the most useful perhaps of any in the whole series. The author is one of the best pathologists in Europe, and we have here the results of his own observations, carefully recorded, during a long series of years. The work is not, therefore, a compilation, but an original Treatise on the morbid anatomy of the organs of Circulation and Respiration. The aim of the author seems to have been to make the actual knowledgeof Pathological Anatomy subservient to an Anatomical History of Disease, the only way in fact in which morbid anatomy can be made useful to the practical physician. So far as it is confined to setting forth the results or *effects* of disease, its value is very small indeed. This distinction it is important to bear in mind.

We can cheerfully recommend the work, as a standard authority on the subject of which it treats. We shall notice it more fully hereafter.

ART. XXI.—*Proceedings of the Annual Convention of the Connecticut State Medical Society.* May, 1846. Hartford, 1846. 8vo., pp. 36.

A NOTICE of this pamphlet was crowded out of our last number. Among other proceedings, we find the following Resolution, relative to the death of the late President of the State Society:—

"*Resolved*, By the President and Fellows of the Connecticut Medical Society, in Convention assembled, That by the death of Luther Ticknor, M. D., late President of the Medical Society of this State, the Profession has lost a prominent member; the community in which he moved, a valuable citizen; the cause of Literature, of Morality, and of Religion, a devoted friend. To the family of the deceased, we offer our sincerest sympathy."

The Committee of Examination of the Medical Institution of Yale College, thus speak of Dr. Ticknor in their Report:—

"Your Committee deem it a duty not to be neglected, to notice the death of the worthy and efficient President of the Board, which occurred since our last meeting. As a member of the board, he was prompt and assiduous, and his death, in the midst of activity and usefulness, will long be regarded by an extensive circle of warm friends, and particularly by the Medical Society of Connecticut, as one of the mysterious dispensations of Divine Providence.

By order of the Committee, ARCHIBALD WELCH."

On the subject of a National Medical Convention, we find the following:—

"Dr. Cogswell made an informal report of the proceedings of the National Convention, lately held in New York, and submitted a resolution, which, after being amended, was passed as follows:

Resolved, That the County meetings have power to appoint one delegate each, to the National Medical Convention, to be holden in Philadelphia, on the first Wednesday in May, 1847; and they are hereby requested to make such appointment, and make return thereof to the Secretary of the State Society."

An Essay on typhous fever was read by Dr. Sill, from which we should be glad, had we space, to make copious extracts. Dr. S. includes under the name *typhous*, both the *typhoid* and *typhus* of Louis, Bartlett and others, and considers them as one and the same disease, differing only according to accidental circumstances, such as the constitution, temperament, or habits of the patients; severity of attack, or malignancy of type, &c. The symptoms are such as laid down by all writers on the subject.

As to the *anatomical lesions*, Dr. S. states that he has never yet made a post-mortem examination in a case of typhous fever, but thinks that "morbid anatomy sheds but very little light upon the pathology of the disease." This may be so, but we believe it to be the duty, nevertheless, of medical men, to investigate the pathological appearances whenever opportunity occurs.

With respect to the *causes* of this disease, Dr. S. remarks:—

"There can hardly be found a medical treatise of typhous fever, in which is not mentioned, as prominent causes of the disease, most of the exciting causes of general debility and exhaustion, both physical and mental,—such as exposure to cold or heat; over-exertion of body or mind; excesses of almost every description; in fact, any and every cause which tends to lessen the vital energies of the system, and dispose it to take on diseased action.

"Notwithstanding all these opinions, emphatically expressed by medical writers, they all,—with perhaps an occasional exception—recommend a strong antiphlogistic course of treatment; thus, according to their own theories, 'rendering the system more susceptible to disease,' by reducing the vital powers, and rendering the system less able to contend successfully with the diseased action.'"

We differ here in opinion with Dr. S.; the treatment recommended by a majority of writers on this disease, is cordial and supporting, not antiphlogistic and depleting.

Dr. S. remarks that he has "never witnessed a single circumstance, however slight, to warrant the opinion that typhous fever is a contagious disease." We have met with a large number.

As to the treatment, Dr. S. thinks that there is but one indication, and that is, to excite and support the powers of life by stimulants and tonics. Of these he considers *opium* the most safe and efficient, given in the first stages to allay morbid irritability and irritation; in the latter, to control irritation, restlessness, anxiety, watchfulness, subsultus and tremors; epigastric sinking, diarrhœa and *coma;* which, he says, is more easily overcome by opium, at short and regular intervals, than by any other remedy.

"During the early stages, the regular and uniform use of simple aromatic bitter tonics, acrid stimuli, and diaphoretic drinks, such as serpentaria, chamomile, columbo, galangal, capsicum and lytta, and such others as belong to a moderate tonic and diaphoretic regimen, are of the utmost importance. The capsicum, in infusion, of all those named, seems to produce more favorable results than all the others, alone or combined. The thirst of the early stages is, by its use, relieved; the dry and darkly coated tongue becomes moist under its influence; the torpid and inactive condition of the mucous membrane of the whole alimentary canal,—the cold and livid extremities,—the epigastric sinking, are all disposed to yield to its free and uniform use.

"The tonic power, however, of any or all of these, is but feeble, and although they may, and often do, accomplish all that is desired, in mild cases, yet in grave cases, there is no one article of the materia medica of

equal importance as a tonic, as Bark. In the form of decoction, conjoined with galangal, it has been my chief dependence during the entire course of the disease. I am aware that some substitute the sulphate of quinine for the bark itself, but after a long trial of it, I find myself wholly unable to depend upon it as a tonic, in febrile diseases.

"Diffusible stimuli, such as carbonate of ammonia, and camphor, I have found highly serviceable, as equalizing the excitement—determining to the surface—calming the low delirium, and acting as a steady, permanent cordial.

"Alcoholic stimulus, in such quantities as the symptoms demand, indicated by the degree of exhaustion, epigastric sinking, state of the pulse, and general appearances of flagging of the vital powers, is appropriate and indispensable, in a great majority of cases; indeed, in many of the grave cases, the free use of alcoholic stimulus is the only means of sustaining the patient, and carrying him safely through the disease.

"The mineral acids are not only extremely grateful to the patient, but important as mild, supporting remedies.

"Blisters, especially in grave cases, are useful auxiliaries as counter irritants, and as proving valuable stimuli to the nervous system.

"Cataplasms, applied to the feet and limbs, in every case where there is unequal excitement, and strong local determination, are important.

"In those cases attended with diarrhœa, or with hemorrhage, the free use of astringents, combined with the tonics, such as nut-gall, or white oak bark in infusion, the infusion of cornus circinata, sulphate of zinc, or acetate of lead, are useful and important.

"For the tympanitic state of the bowels, so often attending, I have used the nitrate of silver with the happiest effects.

"Constant attention should be paid to the ventilation of the room occupied by the patient. Nothing is more grateful, and nothing adds more to his prospect of recovery, than a free circulation of fresh air through his room, and whether it be summer or winter, cold or hot, day or night, the room should be abundantly supplied with pure, fresh air."

With respect to his success in the management of this disease, Dr. S. states that in the whole course of his practice, embracing a period of fourteen years, he has never lost but *two cases*, both of which were brought home from out of town, several days succeeding the attack of one of them, after having been greatly reduced by the repeated use of Brandreth's pills and Epsom salts. He also states that out of upwards of five hundred cases treated by Dr. E. F. Reed, but sixteen only proved fatal.

"Of this number, sixteen only proved fatal, two of these from a relapse, occasioned by imprudence; these had taken drastic cathartics, for a week previous to calling medical aid, and two were seventy-five or eighty years of age. Of these sixteen cases, but two had hemorrhage from the bowels, and one of them heavily purged during the first week of his sickness, and the other suffering from a heavy mercurial ptyalism.

"In conversation recently with my respected friend and instructor, Dr. Pierson, of Windsor, I was authorized by him to say, in regard to the results of his management of typhus fever, for the last thirty-five years, that the probable number of cases of this disease under his care as physician and counsellor, had been from 1600 to 2000, and that of these, including the mild and grave cases, not more than one per cent. had proved fatal; and that these, with hardly an exception, were those in which cathartics and other reducing agents had been tampered with, either at the commencement or during the progress of the disease

"A vast number of these cases have occurred under my own observation, as a student of Dr. Pierson, and from my youth, as a neighbor; and I know very many of them to have been of the most malignant type.

"I ought perhaps to add, that Dr. Pierson's general course of practice coincides fully with the views which are here expressed."

PART THIRD.

American Intelligence and Editorial.

ADDRESS TO THE MEDICAL PROFESSION, IN RELATION TO THE OBJECTS OF THE NATIONAL MEDICAL ASSOCIATION, BY THE COMMITTEE APPOINTED FOR THAT PURPOSE.

ABSTRACT from the minutes of the proceedings of the National Medical Convention, held in the city of New York, in the Month of May, 1846.

"*Resolved*, That a committee of seven be appointed to prepare, and issue an address to the different regularly organized medical societies, and chartered medical schools in the United States, setting forth the objects of the National Medical Association, and inviting them to send delegates to a Convention to be held in Philadelphia, on the first Wednesday in May, 1847."

In obedience to the above resolution, the committee appointed for the purpose present the following remarks to the members of the medical profession generally, as well as to the several bodies named in the resolution:—

In compliance with an invitation from the Medical Society of the State of New York, delegates from various medical societies and schools met in Convention in the city of New York, on the first Tuesday of May, 1846. About one hundred members were present, representing thirty-four different medical associations, and residents in sixteen different States of the Union. The object of the Convention was, by a concert of action of medical men from every part of the country, to advance the interests, the honor, and the usefulness of the profession. The result of their deliberations, as shown in their public proceedings, has been widely circulated, so that all who take an interest in such matters, are probably fully informed of it; still, some remarks upon the course which was pursued, together with the reasons for it, may be appropriate.

The first object which engaged the attention of the Convention, was the necessity of forming some plan of organization, by which medical men in every part of the country may communicate with each other, and act in concert, in regard to their common interests. The general opinion was, that this desirable object would best be attained by the formation of a National Medical Association, to consist of members from every part of the country, who should meet together for consultation and action, at such times and places as they might deem expedient. Although no doubt was expressed of the propriety of such an organization, there were other subjects connected with it, such as, who should be members of the association? how and by whom should they be selected? if delegates, what should be their number? what power

should be conferred upon them, and how far should their acts be binding upon the bodies whom they represent? concerning which there would probably be difference of opinion. As no one had been charged with the consideration of these subjects, no definite plan of organization had been prepared, upon which the Convention could act with that careful deliberation which the importance of the business demanded. It was thought best, therefore, to postpone all definite action upon it until a future Convention. This opinion was strengthened by the fact, that although the number of members present was larger than had been anticipated, yet many most respectable medical societies and schools, who are doubtless equally solicitous with those who were present, for the welfare of the profession, and as ready to promote its interests, were not represented. This deficiency, it was hoped, would be remedied in a future Convention. In the meantime, the consideration of these subjects was entrusted to a committee, who will prepare a plan for a National Medical Association, which will be presented to the proposed future Convention.

The other subjects which engaged the attention of the Convention, related principally to medical education; such as the qualifications which should be required of those about to engage in the study of medicine; the course of study which should be pursued by them; the mode of examination which should be adopted, and others of a similar kind. For reasons like those given above, these several matters were also placed in the hands of committees to examine, and report upon them. The same course was also pursued in regard to the preparation of a code of medical ethics, by which the intercourse of physicians with each other, and with the public, shall be regulated.

From this statement it will be seen that matters of great interest are presented for consideration, and that if wise measures in regard to them are adopted, such errors and abuses as may be found to exist, will be corrected; the profession will be guarded against the admission of incompetent or unworthy members; the purity, professional and moral, of those who are allowed to continue in it, will be preserved; and that thus full assurance, such as it has a right to demand, will be given to the community, that all who are acknowledged by medical men to be of their number, are worthy and competent to perform the duties, and to sustain the responsibilities of an arduous and honorable profession.

It remains to be seen whether these desirable objects shall be accomplished. It is obvious that this can be done only by general and united exertion. All partial or divided action will be unavailing. It is equally true, that whatever is done, must be accomplished by medical men themselves. In some countries, the interests of the medical profession, like others of great importance to the community, are regulated, sustained, and protected by public law. In this country, no general law, even if it were desirable, can ever exist. In many of the States, no laws upon this subject have ever been enacted; in several, where they have formerly existed, they have been repealed, and in those where they still remain, there is a general complaint of their inefficiency. In this State of things, the only resource which remains, is, for medical men to establish and enforce among themselves such regulations as shall purify and elevate their own body, and thus more fully command the respect and confidence of their fellow men. The proposed association, if it becomes

general, may be the means of accomplishing much of this good work. The opinions of such a body of the most respectable members of the profession, enjoying the confidence of their brethren and of the public, freely expressed after full consultation and careful deliberation, although not clothed with the authority of law, will still command respect, and for the most part compliance. A public opinion in regard to the subjects decided upon, will be created, which will be more controlling than law. It is by creating and sustaining a sound and healthy public opinion, that the association will prove most beneficial.

In calling the attention of the physicians of this country to such an effort at this time, it is not intended to express the opinion, for no such opinion is entertained, that they are behind those of other countries, or the members of the other professions in this, in general intelligence, in scientific attainments, or in practical skill. Still, it is to be remembered that the present is peculiarly an age of advance in every department of science, and that at such a time to rest satisfied with present attainments, and to make no provision for increased acquisitions, is practical retrocession.

In this state of things, the committee feel themselves fully authorized to call upon the medical profession throughout the country to consider, carefully and deliberately, the matters which have been presented to them, and upon which a future Convention will be called on to act. They also earnestly invite all medical societies, the faculties of all medical colleges, and all similar associations, to appoint delegates to meet in Convention in Philadelphia, on the first Wednesday in May, 1847.

It is confidently believed that a Convention thus constituted, embodying the wisdom, and acting under the sanction, and with the authority of the united profession, will devise such measures as shall command the respect of all who are interested in the promotion of medical science, and the physical welfare of man. In behalf of the committee,

J. KNIGHT, M. D., *Chairman.*

—

3. HAS A PHYSICIAN A RIGHT TO COMPENSATION FOR MAKING A POST-MORTEM EXAMINATION AT THE REQUEST OF A CORONER? Opinion of the Hon. Judge ELLIS LEWIS.

Dr. W. L. Atlee *vs.* Lancaster County. No. 50, January, 1844.

Opinion of the Court.—This is an action to recover compensation for professional services rendered by the plaintiff, as a physician, at the request of the coroner, upon a *post mortem examination.* It is the duty of the coroner, in cases of sudden death, or where any are slain, to hold an inquest, *super visum corporis,* to inquire into the cause of death, "by the mark on the neck, or by a mark on any of the limbs, or *by any hurt found on the body.*" 4 Ed. 1. The statute of Edward IV., regulating the duties of the coroner in this respect, is in affirmance of the common law, one of the great advantages of which is, its constant adaptation to the progress of business, the advanced state of the sciences, and the habits of the people. In this enlightened age, a coroner who would undertake to consign to the grave the body over which he had held an inquest, without availing himself of the lights which medical science has placed at his disposal, would be regarded as unfit for the office, and unworthy the age in which he lives. A thorough examination, aided by the highest professional skill within reach, is absolutely necessary to the administration of justice. Without such examination, groundless suspicions may be entertained, and prosecutions commenced, at once cruel to the objects of them, expensive to the county, and wasteful of the time and talents of all per-

sons engaged in them. But this is not all. Without a thorough examination of the body, and a complete demonstration, from the evidence thus in the power of the commonwealth, that the death was caused by violence, the guilty agent cannot be convicted. When, from ignorance in the examination of the body, the cause of death is left in doubt, the accused will, in general, escape the just punishment due to his crime; because in all cases of doubt, he has a right, under the law, to demand an acquittal. Thus, the guilty are again let loose upon society, and the public is deprived of that protection which the laws were intended to provide. There can be no doubt of the duty of the coroner to require such aid as was given in this case; and it seems equally clear that his powers are commensurate with his duties.

It is true that medical witnesses may be called upon to give evidence of any *facts* within their knowledge, and also of the *opinions* which their researches and experience have enabled them to form on questions of science pertinent to the case. But they cannot be compelled to devote their time and talents, without compensation, to the unpleasant duties of a *post mortem examination*—to assume the responsibilities of an investigation, upon which the life of a fellow-being may depend—and to encounter the painful ordeal of a thorough cross-examination, generally conducted by gentlemen of science and courtesy, but sometimes by individuals not remarkable for either.

Even where nothing further is asked of the medical practitioner than his attendance as a witness, his case is one of peculiar hardship. His business is of a character which requires the employment of his skill and judgment. It is in these alone that his patients confide, and no deputy or substitute can supply these qualities. To him the ordinary fee of a witness is a very insufficient compensation. "The same policy which exempts medical practitioners from attendance on other public duties may suggest the propriety of allowing them some adequate indemnity when their assistance becomes indispensable; and this not only for their private and immediate advantage, but ultimately for the public benefit; for, if properly remunerated for their attendance, practitioners of a superior class would not be unwilling to devote some portion of their time to the assistance of public justice; whereas, under the existing system, it is notorious that all who can will avoid the burden; and the duty, therefore, devolves on those who are least competent to its execution; this evil is particularly apparent on coroners' inquests, where the opinion of a shop-boy has often been allowed to determine a question *in limine*, which, properly investigated, might have required the first science to obtain a satisfactory result."—1 Par. & Fonbl. Med. Jur., 157.

As attendance is more burdensome on a professional man than on others, so also is it more frequently called for. Other men are only called to testify to FACTS within their knowledge. The professional man is called upon for his OPINIONS. Those, therefore, who stand highest in public estimation, and whose time is most valuable to themselves and their patients, are the most frequently called to discharge these unprofitable duties. A consideration of these circumstances has doubtless led to the practice in England of allowing medical witnesses more than the usual witness fees, as a compensation for the loss of time.—Willis *v.* Peckham, 4 Moore; Severn *v.* Olive, Mich. Term, 1821, C. B. Two guineas per day is the usual allowance to medical witnesses in England, "but no allowance is made for the time spent in making chemical experiments, *for the purpose of perfecting themselves in the science which they profess*, because it is alleged that they ought not to *acquire their knowledge at the expense of the parties.*" —Ap. to 3 Paris & Fonb., p. 203; Severn *v.* Olive. How far they should be allowed for the time spent in the application of that knowledge to the particular case under investigation is a question entirely different. The principle by which they are compensated for their loss of time as witness-

es, and considerations of policy and justice, sanction an allowance for the loss of time spent in a *post mortem* examination.

This expense is a necessary incident to the administration of justice for the county. The coroner of the county is charged with the duty of holding the inquest, and has, as an incident to his authority in this respect, the power to summon such aid as the purposes of justice may require. In doing so, he acts not in his individual capacity, but in his official character as the officer of the county. "The power to order, implies the promise to pay."—Commissioners *v.* Hall, 7 Watts, 291. It is upon this principle that the county is liable for the contingent expenses of the court—for the fire-wood, candles, &c., consumed in the court-house—for the expenses of keeping a jury together at a hotel when ordered by the court, as is usual in capital cases—or for the expenses of medical services ordered by the court for a juror suddenly ill.—7 Watts, 291.

The plaintiff is, therefore, entitled to recover in this action, such a sum as the jury shall deem a reasonable compensation for his services,

Nov. 28th, 1844. ELLIS LEWIS.

The jury rendered a verdict in favor of the plaintiff for the whole amount of his claim.—*Am. Jour. Med. Sci.*

Medical School at Buffalo.—A charter for a University at Buffalo has been granted by the Legislature of New York, and the medical department has been fully organized. The following constitute the faculty: *Chemistry and Pharm.*, J. HADLEY, M. D.; *Physiology and Med. Jurisp.*, C. B. COVENTRY, M. D.; *Gen. and Spec. Anat.*, JAMES WEBSTER, M. D.; *Path. and Mat. Med.*, C. A. LEE, M. D.; *Princ. and Pract. Surgery and Clin. Surgery*, F. H. HAMILTON, M. D.; *Obstet. and Diseases of Women and Children*, J. P. WHITE, M. D.; *Princ. and Pract. Med. and Clin. Med.*, A. FLINT, M. D. The first course will commence on the 24th of February, 1847.—*Ibid.*

East Tennessee Medical Society.—This association held its second meeting on the 7th May last. A resolution was adopted requiring the secretary to correspond with the State Societies in relation to the propriety of petitioning the Legislature to regulate by law the practice of medicine. The second annual meeting will be held at Jonesborough on the first Thursday in May, 1847.—*Ibid.*

Preliminary Education.—One of the resolutions adopted by the National Medical Convention, declares "that it is desirable that young men, before being received as students of medicine, should have acquired a suitable preliminary education." The committee appointed under this resolution, to report on the standard of acquirements, are busily engaged on the subject, and would be pleased to receive from Professors in the different Medical Schools and private teachers, their views in relation thereto. Communications should be addressed to Dr. J. COUPER, Newcastle, Del.—*Ibid.*

Health of the Army on the Rio Grande.—We learn from our friends who have just returned, and by letters from the army, that the volunteers are suffering greatly from diarrhœa and dysentery, arising from bad water, bad weather, and diet, to which they are unaccustomed. The chief sufferers are the regiments from Tennessee, Indiana, and other States in that region. This is not to be wondered at, as the change of climate and mode of living, are so marked. It will be very fortunate if the campaign does not prove *disastrous* from sickness. No serious mischief seems to be apprehended from *Mexican bullets or bayonets.* The volunteer regiments now on the Southern banks of the Rio Grande, from the States of Ohio, Illinois, Indiana, Tennessee, Mississippi and Alabama, are composed, in a great measure, of *the flower of our youth*, who have been suddenly ushered into a *climate and service* to which they are altogether unaccustomed.—*New Orleans Med. and Surg. Journal*, Sept., 1846.

THE LATE DR. LOVELL, SURGEON GENERAL U. S. A.

Dr. Lee, New York, Sept. 24th, 1846.

Dear Sir,—In the last number of your journal, a list of the Medical Staff attached to the United States Army, reminds me of a biography I have in my possession, of the late Dr. Joseph Lovell, Surgeon General of the U. S. Army, which I procured through the politeness of my friend, Dr. Thomas Miller of Washington City. It was my intention to have published the biography in the "United States Medical and Surgical Journal," but the discontinuance of that publication prevented it. Feeling a strong desire to have the biography of Dr. Lovell laid before the medical profession and the public, I offer it to you for publication in your journal, with the understanding that you or your publishers fulfil my original intention, namely, present one hundred copies of the biography, neatly put up, to the President of the Medical Society of the District of Columbia, for the use of its members; also send fifty copies to Professor Warren of Boston, to be distributed among Dr. Lovell's relations and personal friends in that section of the country. I am, dear sir,

Yours, respectfully,

James Webster, *Formerly Publisher, &c., of the Amer. Med. Recorder, U. S. Med. & Sur. Jour.*

Washington City, Oct. 20, 1836.

At a special meeting of the Medical Society of the District of Columbia, held this day at the Medical Hall, Dr. Thomas Miller announced the death of Joseph Lovell, M. D., late Surgeon General of the United States Army, and member of the Society, and at the same time delivered a neat and appropriate address, setting forth the public worth and private virtues of the deceased, with a brief sketch of his life and character.

On motion, a committee was appointed, consisting of Drs. Sewall, Hunt, and Miller, to report such resolutions as this melancholy occasion called for. In a short time the following preamble and resolutions were presented and unanimously adopted:

In the death of the late Joseph Lovell, M. D., Surgeon General U. S. Army, the Society has lost one of its most valuable and intellectual members, and the medical profession generally has been deprived of one who has always sustained its dignity by great medical attainments and by a high and honorable course of conduct; Therefore,

Resolved, That the members of this Society wear crape on the left arm for thirty days, as a token of their grief and of their high respect for his memory.

Resolved, That the Secretary of the Society be directed to present a copy of these resolutions to the bereaved family as an expression of sympathy in their deep affliction, and that he cause the same to be published in the papers of the city. F. MAY, President.

R. JOHNSON, Secretary. *Gl. & Intel.*

Eulogy read before the Medical Society of the District of Columbia, on the 20th Oct., 1836, by Thomas Miller, M. D., Professor of Anatomy in the Medical Department of the Columbian College, Washington, D. C.

"*Mr. President and Gentlemen of the Society,*

But a few weeks have elapsed since we were assembled to perform the last sad honors to the remains of a departed friend and member of this Society. The melancholy duty now devolves on me, of announcing to you the death of another of our body—our friend and associate, *Dr. Joseph Lovell*, is no more—he died on the 17th inst. at half past three o'clock, P. M., after a most severe and painful illness of fourteen days' duration; resigning himself and his orphan children to his God. By this decree of Providence we have been robbed of a friend—society of a most useful and interesting member—the public of an important functionary; and a large and young family of a devoted and only parent.

While we deeply lament the loss we have sustained in the death of our

friend, it is a most pleasing consolation to us to feel that he has made a happy exchange—that he has left a world of trouble and woe, for one of eternal quietude; and that he is now enjoying the reward of a sincere Christian.

The life of Dr. Lovell presents many interesting incidents, both of a public and private character. To do more than allude to a few of these, would be transcending our present limits. Of his early history, we are little informed,—while still very young, he took his degree of A. B. in Harvard University. Immediately after this he commenced the study of medicine, under the instruction of Dr. Ingals of Boston. He attended Medical Lectures in the Boston Medical College, where he graduated as Doctor of Medicine; being very young and diffident of his qualification as a practitioner of medicine, he directly, after receiving his diploma, devoted himself almost exclusively to the study of Practical Anatomy and Operative Surgery, under the supervision of Drs. Ingals and Warren. In these branches he attained great proficiency; and if, in after life, he could be said to be more familiar with one branch of his profession than another, that branch was Operative Surgery—the practice of which he always preferred to the other branches of medicine.

With true devotion to his profession, and a desire to contribute to the relief of his suffering fellow beings, Lovell joined the army as surgeon of the 9th regiment of infantry, at the commencement of the late war (of the year 1812, 15th May).—In the field he rendered much essential service, gaining the confidence and esteem of such of our brave soldiers as were placed under his charge,—performing many operations with skill and success.

He was, however, soon promoted (30th June, 1814) to the situation of Hospital Surgeon; where, young as he was, he won for himself that high professional standing, which is ever the award of science, philanthropy, gentlemanly deportment, and professional skill, and which he maintained unimpaired to his death.

After the close of the war, when our army was about to be placed on the peace establishment, and saw no further active duties presented for our brave enterprising, and talented youths—Dr. Lovell, as did a number of others, determined to resign his commission, and retire to his native city, for the purpose of pursuing his profession.

From this he was deterred, by being selected by the venerable President Monroe (in 1818) to fill the situation of Surgeon General of the United States Army. This mark of distinction evinced the high degree of esteem that was entertained for his professional and literary attainments; the situation being at that time sought by several of the most respectable and talented medical gentlemen of the army,—all, or most of whom, were senior to Dr. Lovell.

To the subject of the medical regulation of the army, Dr. L. had long before his appointment devoted much time and attention. But it was not till after he occupied the positive situation of Surgeon General, that his talents were fully developed, or his character properly appreciated. The unanimous voice of the army yielded to him the merit of many very important improvements in that department. He had it more in his power to carry into effect (encountering many difficulties) his early impressions on the subject of army regulations, which were now more matured. He was peculiarly fitted for his office. Connected with a full understanding (from practical observation) of what was really for the best interest of the medical staff; he possessed a mind capable of the greatest degree of exertion,—discriminating and analyzing as it progressed in its subject, cautiously noting all that was presented for its investigation; and when matured on any point, it was unwavering. Prompt in his decisions, yet always open to conviction, he was uninfluenced by prejudice and unmoved by personal predilections in the distribution of his official favors.

It was to his exertion, that the medical department of the army owe its

present happy organization. At his suggestion and urgent solicitation, the army medical board of Examiners was established. I need not enumerate the happy tendency of this mode of selecting army medical officers. Although it has been in operation but a few years, we can already witness its beneficial effects. The officers and soldiers now feel perfect confidence in their medical advisers. They must be competent, from the fact of their having undergone a most rigid and scrutinizing examination, by scientific and skilful judges, in whose decisions no feeling of personality can live—from this system of examination the ranks of the medical department of the army must be filled with the most choice materials.

As much as his time was occupied by his public duties, yet Dr. L. did not neglect what was due from him as a citizen,—as such he was most highly esteemed. His reservedness and occasional taciturnity may often have been construed into coldness and indifference to the sufferings of humanity; far otherwise was this from his *real nature*. I have seen him when a casual observer would suppose he felt little or not at all, suffering the greatest mental anguish. He was susceptible of the deepest sympathy, and yet he never displayed his feelings; this self-control was one of the leading traits of his character.

As a neighbor, he was kind and charitable; as a friend, sociable and sincere; as a husband and father, devoted. To an enemy he was forgiving—as a physician, he was skilful—as a surgeon, cautious, but bold and judicious; clear and discriminating in his diagnosis and prognosis, and prompt in the application of his remedies

In his intercourse with his professional brethren, he was always liberal, distinct in his views, ready to listen to any suggestions, and deliberate on the propriety of their adoption; punctual in time in his meeting, and scrupulously punctilious in his professional etiquette.—Honest and honorable, he was never known to be guilty of a *trick* to the injury of his medical brethren, or to promote his own interest.

In the welfare of this Society, as well as that of the Medical Association of Washington, he has ever taken the deepest interest, using his utmost to attain for them a standing commensurate with their importance, and which would improve their future usefulness, both to the community and the profession. He was among the *first* instigators of the association, and he was one of its most zealous supporters to the day of his death.

Such is a brief sketch of the man whose sudden and untimely death has caused us to meet here to-day,—and in honor of whom we are now to perform our last melancholy duty. It may truly be said that his was a life of great usefulness, but brief existence."

Stricture of the Rectum.—*Mr. Editor:* Three weeks ago I was called to prescribe for P. K., a young man who had swallowed a peach-stone two days previously, and was suffering from ineffectual attempts to void it.

I prescribed ol ricini. ℥iss.; and the same quantity of oil in the evening, in case he was not relieved: also to eat freely of pudding made with magnesia in it.

When I called the next day, I learned (as he had gone out) that he vomited the oil and did not repeat it, but ate freely of the pudding.

Eight days afterward I was sent for. He complained still of an ineffectual disposition to void his fœces, tenesmus, &c. On examining him per rectum, I discovered at the depth of nearly three inches, a firm annular stricture, which felt as though a thread was drawn so closely around the gut as only to admit the point of the finger by pressure, and

was undilatable by what force I could exert for some fifteen minutes against it. I prescribed another dose of oil.

The next morning I invited my friend, Dr. Jno. Watson, and went prepared to remove the difficulty. The oil had not passed from him, though it had caused great pain from the straining. Upon examination the stricture seemed a very little relaxed, and the pit could be felt above it lying crosswise, having acted as a valve. The patient was directed to lean over a table: I then passed the index finger of the left hand into the rectum, and the end of it through the stricture. Upon this I slid the bistoury cache sidewise, until the cutting edge was opposite the stricture, turned it backwards to the sacrum, and, with the finger under, pressed upon and divided it, bringing down the pit with the finger to the sphincter. He immediately voided it without any difficulty. The next day he was about, and has had no untoward symptom since.

New York, Oct. 15, 1846. E. A. VANDERPOOL, M. D.

Another Prosecution for Malpractice.—An action for damages in the Circuit Court of Kalamazoo, Michigan, against Dr. Nathan M. Thomas, resulted in a verdict of $300 in favor of the plaintiff. A new trial had been granted, but at the same time it was taken out of Court, and referred to Dr. Z. Pitcher, of Detroit, Mich., and Dr. Daniel Brainard, of Chicago, Ill., as arbitrators. We copy the following award from the Illinois and Indiana Medical and Surgical Journal:

"The undersigned, to whom was submitted the matter in difference between John Beals and Nathan M. Thomas, having carefully examined the injured limb of Dephne Beals, and heard the testimony adduced in relation to the injury and its treatment, and the arguments of council in the cause, respectfully report to the Honorable Chief Justice of the State of Michigan, presiding over the Circuit Court of Kalamazoo County,

"That they agree in the opinion, that the said injury was a dislocation of the upper end of the radius forwards not detected at the time of its occurrence, and that the defendant is therefore liable to the imputation of mal-practice, from defective anatomical knowledge.

"Taking into consideration that this dislocation is one of rare occurrence, and has in several cases been found to be incapable of reduction, and that it was not in this instance attended by the usual distinguishing signs, and was obscured by considerable swelling;

"Considering farther, that the study of anatomy essential to the proper treatment of such cases, is by the laws of the State of Michigan a penitentiary offence; together with the fact, that the limb is still highly useful and may, in our opinion, be essentially improved by judicious treatment, we award that the defendant in this case, is not justly liable to any damages, and (if it belong to the board to decide this question) we further award that each party shall pay his own costs. ZINA PITCHER.

"Kalamazoo, June 13, 1846. DAN. BRAINARD."

Baltimore College of Dental Surgery.—We are gratified to perceive that this valuable institution, the only one of the kind in our country, or perhaps in any other, is rapidly advancing in its career and usefulness. The Chair of Operative and Mechanical Dentistry hitherto vacant, has been recently filled by the appointment of Amos Westcott, M. D., of New York —a gentleman of distinction in his profession. A new edifice is also expected to be completed for the ensuing session, combining all the conveniences required for Lectures and practical instruction. It is only by sending forth enlightened Dentists that the practice of this interesting department of Surgery can be placed upon that footing of respectability to which it is justly entitled.

Uterus without an Os Tincæ.

"Dr. Flint:—

"Dr. —— (for obvious reasons names are suppressed), a few days since, brought to me the ruptured uterus and fœtus described in his letter, and in his presence, with Dr. Mixer, I have examined the whole carefully.

"The uterus is torn near the attachment of the right broad ligament—walls on this side excessively thinned, so much so in some places as to leave little else than peritoneum,—opposite side of uterus about 1-3 of an inch in thickness, and of usual consistence. Length of body of uterus, 3 inches—breadth, 2 1-2 inches; cervix uteri 2 inches long, firm and broad at base, but gradually and regularly tapering to a thin, flattened extremity, covered by a smooth mucous membrane. Upon a careful dissection of the cervix, longitudinally and transversely, no channel, or line, or cicatrix, indicating the previous existence of an os tincæ, could be discovered. The structure is rather more dense than that of the uterus in its natural state, but its density is uniform—it is not scarred or corrugated, nor does it present any evidence of its being a result of disease. The mucous coat which covers it, lies free, and can be as easily removed as such membranes usually may be.

"The right fallopian tube terminates at about the middle of the right side of uterus—right ovarium is larger than natural, but apparently healthy. On the left side there is no broad ligament, nor fallopian tube, nor ovarium, but the peritoneum covers it as smoothly as in front.

"Dr. —— adds to what has been said in his letter, that the girl was always healthy—had menstruated three years, or until last three months, regularly.

"The whole was laid before the Buffalo Medical Association for their examination, at its last meeting (Sept. 2d), and the records of the Society certify substantially to the same as above.

"Through the politeness of Dr. ——, the uterus, &c., is now the property of the Buffalo Medical College, and may at any time be seen by medical gentlemen.

"F. H. Hamilton.

"*Buffalo, Sept.* 5, 1846."

Buffalo Med. Journal.

Suit for Mal-practice.—In the May No. of the St. Louis Medical and Surgical Journal the notes of a suit for mal-practice are published, in which the patient, Mary Dugan, was plaintiff, and Drs. Adreon and Beaumont were defendants. Dr. S. W. Adreon was the attending physician, and was charged and tried for opening a hernial tumor in the right inguinal region, which terminated in an artifical anus.

In his defence, Dr. Adreon produced evidence to show that it was a case of *Tuphlo-Enteritis*, or Inflammation of the Cœcum, terminating in ulceration and perforation of that portion of the bowels and pointing in the right groin. The jury returned a verdict in favor of both defendants. This unfortunate case not only resulted in a vexatious suit, but it appears also that it involved a dozen doctors in a medical quarrel.

Some of the physicians who saw the patient, were charged with improperly interfering in the case, and instigating the suit. In reply to this charge, they vindicate themselves by saying that they were forced into a temporary attendance when no one had charge of the patient, and that they endeavored to dissuade the patient from commencing legal proceedings.

It appears that there was an honest difference of opinion in relation to the case, and it is to be regretted that it was not confined to the consultation-room. In medicine, as in politics, there may be a difference of opinion without a difference of principle, and if the law of medical ethics is observed, to confine such differences to the consultation-room, all subsequent difficulties may be avoided. At some subsequent period, if an

error has been committed, it may be published for the benefit of the Profession, without injury to the attending physician.

We will illustrate this position, by giving now the outline of a very important case which occurred in this city about thirty years since. A young lady by the name of Hubbard, from Great Barrington, came to this city and consulted the late Dr. Wight Post, for a pulsating tumor situated over the carotid artery, on the right side of the neck. The conclusion was, that the tumor was aneurismal, and that it required a ligature of the carotid. At that time it was supposed that the carotid had never been tied in this country, though it has been since asserted that Dr. Twitchell, of New Hampshire, had previously applied a ligature to this vessel. Dr. Post accordingly took up the carotid, and the patient recovered from the operation. The case will be found detailed in the Physico-Medical Transactions. It so happened, however, that the tumor did not disappear; and it was in contemplation to apply a ligature to the opposite carotid, upon the ground that the tumor was fed by the anastamosing branches of the opposite carotid. Before this second operation, the patient died, and upon a post-mortem examination it was found that the tumor consisted of an enlarged gland perforated through its base by the carotid artery. The pulsation of the tumor was found then to be owing to the carotid having passed through a small portion of it. Here, then, was a case, which contributed at the time very much to exalt the surgical reputation of Dr. Post, who stood deservedly high in the Profession, and which afterwards, according to the opinion of many, was a great error in diagnosis.

But it seems that in the case at St. Louis, the attending physicians not only got by the ears, but that the editors of the Journal had to take their share of the censure, because they published a reply to the *ex-parte* report of the trial. It is really amusing to see how the poor editors receive their castigations from the querulous members of the Profession, no matter what position they take in these quarrels. About a year ago, we were attacked because we rejected an article of a similar kind, and now the editor of the St. Louis Journal gets belabored for doing what we refused to do. Verily, doctors are difficult to suit.

THE ANNUAL MEETING OF THE NEW YORK SOCIETY FOR THE RELIEF OF THE WIDOWS AND ORPHANS OF MEDICAL MEN was held on the 7th instant.

The following is a list of the officers for the ensuing year:—

EDWARD DELAFIELD, *President.*

JOHN STEARNS,
F. U. JOHNSTON,
I. REVERE, } *Vice Presidents.*

ISAAC WOOD, *Treasurer.*

H. D. BULKLEY, *Secretary.*

Annexed we also give a list of the managers, one third of whom go out every year.

Luke Barker,	James Cameron,	Jas. Macdonald,
E. L. Beadle,	G. P. Cammann,	V. Mott,
W. N. Blakeman,	A. Dubois,	W. Parker,
J. H. Borrowe,	J. Foster,	A. C. Post,
J. C. Bliss,	J. H. Griscom,	H. Sweeny,
W. P. Buel,	R. K. Hoffman,	P. Van Arsdale,
H. D. Bulkley,	J. Linsly,	J. R. Wood.

There are sixty-three members, of whom fifteen are life members by the payment of $100 at a time.

The funds amount to nearly four thousand dollars, the greater part of which is advantageously loaned on bond and mortgage, and the prospects of the Society are very encouraging.

Dr. Rodgers' Operation for Tying the Left Sub-Clavian within the Scaleni Muscles.—We copied an article in our May Number, from the New Orleans Journal of Medicine, to the effect that the above operation, supposed to have been original with Dr. Rodgers, had been performed in several instances, by surgeons in New Orleans. This statement has been recently retracted by the last-named Journal, and we are now informed that the artery was ligated *outside* of the scaleni muscles. Dr. Kearney Rodgers is therefore entitled to the credit of originality in this difficult and hazardous operation.

—

Shall the Charter of the New York Medical Society be Surrendered?—We have been unable to attend the different meetings of our County Medical Society, recently convened for the purpose of discussing the question whether its charter should be surrendered to the Legislature, the power from whence it was derived. We have, therefore, heard none of the arguments adduced on either side of the question, and the conclusion at which we have arrived is the result of our own unbiassed and deliberate judgment. We believe, then, that the Society should retain all its corporate rights and privileges, and wherein they are inadequate for the attainment of the ends for which the Society was originally constituted, that it should petition the Legislature for such a modification or extension of its powers, as may be sufficient to ensure the objects of its creation. The Society should certainly possess the power of admitting and expelling members according to its by-laws, without resorting to the judiciary; in other words, a right to judge of the qualifications of its members—a right which every other incorporated or voluntary society possesses, and without which no society can long exist. It should, in connection with the other County Societies, ask for a repeal of all those regulations, concerning the profession, which are inconsistent with such power; in short, that the societies shall have the power of regulating their affairs by such by-laws as each society shall, in its majority capacity, deem right and proper for its own interests. That the Legislature would listen to such a petition, there can be no reasonable doubt whatever entertained. We have heard of no disposition on the part of the other Country Societies to relinquish their charters, and we know of no good reason why they should do so. The principal argument urged for the adoption of such a course by our own Society, we understand to be the want of disciplinary power. It is contended by many, however, that it already has such power (See Sec. 13th of the "*Statutes*," and Sec. 3d, of the "*General Regulations*," and the *By-Laws*, Art. 1 and 5th; also the *Covenanting Obligation*, xv., 3). But to place this matter beyond all doubt, we think a special act should be obtained from the Legislature for that purpose. The advantage possessed by a corporate body over a voluntary society, are too obvious to dwell upon here, and we should be sorry to see them voluntarily relinquished, without gaining any equivalent. That the Society, under its present organization, lacks the principle of vitality, we think, is sufficiently evident; and so far as we recollect, it has never been a very efficient laborer in the cause of science, even when it possessed the powers of which it is now supposed to be deprived. We should be rejoiced to see it arouse from its lethargy, and take that position in the medical world to which it is entitled from the number and respectability

of its members; and all that is necessary to ensure this result is, that *each member should do his duty.*

QUARANTINE IN PHILADELPHIA.—(The following letter was received too late for insertion in our last number.)

PHILADELPHIA, July 27th, 1846.

"DR. C. A. LEE,

Sir,—The following are the answers to your questions according to our quarantine laws, which are in force from June 1st to Oct. 1st, in each year.

QUEST. 1st. When vessels are required to be cleansed and purified, what is the mode and usual time required?

ANS. The cleansing and purification in the Port of Philadelphia has been as follows: The bilge water is changed until it is as pure as our river water; this is done in all cases on the arrival of a vessel at the Quarantine Station. No vessel is ever permitted to pass without this being done. When sickness prevails on board, all clothing is washed, bed and bedding well aired, cabin and forecastle washed and well cleansed, fore and aft runnings washed and perfectly cleansed and frequently thoroughly white-washed; it will require two or three days to perform the above.

Q. 2d. Are vessels coming from the intertropical ports in the summer months required to undergo a stated quarantine, and how long on an average?

A. No. When the passengers and crew are all well no vessels are ever detained in consequence of their coming from certain ports.

Q. 3d. Has Yellow Fever been traced to vessels thus arriving within the last 20 years in your city?

A. No. We have had few or no cases within the last twenty years; if any they were sporadic cases. The disease prevailed here in an epidemic form about the year 1819 or 21, and was satisfactorily traced by Prof. Jackson to domestic causes.

Q. 4th. The opinion of your physicians as to the contagiousness of the disease.

A. Almost every respectable physician believes in its non-contagious character.

Q. 5th. Are hides, skins, rags, hair and wool, unladen at your wharves in the summer months without undergoing quarantine?

A. Yes. But it is a practice prevalent at our quarantine station, to open all hatches and examine skins and hides; if found unsound and offensive, to remove them from the hold to dry and purify; if very foul, they are removed to the store-house and the vessel permitted to pass.

Q. 6th. How often are you obliged to order vessels laden with such cargoes (skins, hides, &c.), to discharge elsewhere than at your wharves?

A. Vessels are seldom required to discharge their cargo elsewhere; but when they have arrived at the port and the cargo is ascertained to be in an offensive state, the vessel is required to lie out in the stream, and the cargo removed by lighters to some of the distant factories.

Q. 7th. When vessels are ordered to undergo Quarantine are passengers allowed to land?

A. Yes. By giving bonds in the sum of five hundred dollars, that they will not enter any of our populous cities within twenty days. In case the vessel is discharged within that time, they are also relieved from

this obligation. This might happen in four or five days, all depending upon the cause of the vessel's detention.

Respectfully yours,
H. D. DIETRICH, M. D.
Port Physician."

Cholera on Board the U. S. Ship Columbus.—From a letter received from the Surgeon of the U. S. Frigate Columbus, dated at Sea, April 6th, 1846, we learn that this vessel sailed from the Bogue on the 6th of March, for Hong Kong, on the way to Manilla. The vessel arrived within 12 miles of Macao, and came to anchor, where she remained taking in supplies until the 13th; on that day the Columbus sailed for Manilla, and the next day the Influenza made its appearance, and in the course of two days it increased the sick list to more than 120. This disease soon subsided, and the vessel arrived at Manilla on the 24th with the health of the crew quite restored. About 8 o'clock on the evening of the 26th, the first case of cholera occurred, which rapidly ran its course into fatal collapse. Another case of attack occurred the same evening, and both died the next morning. On the 29th three more cases occurred, which terminated fatally the next morning. On this day the vessel sailed at noon; on the 31st two more of the crew were consigned to the deep, and the sick list received accessions almost every hour. The weather was excessively hot, and there was not wind enough to take the vessel into the open sea. On the 1st of April, three more were buried, on the 2d two more, making 12 in all, who died in the course of six days. Thirty-five cases occurred in all, among a crew of nearly 800; the decline and rapid disappearance of the disease were attributed by the Surgeon, Dr. Ticknor, to the ship sailing into the open sea so soon after the disease made its appearance. The cholera prevailed at Manilla, when the ship arrived there, and it is stated that this place has not been free from the disease for several years. On the 9th the ship was at Macao, when there had been no more cases of cholera, and the sick list was reduced to 23.

From letters dated on the 21st and 27th of April, off Macao, from whence the ship was to sail in a few days for the North East Coast, we learn that the crew were healthy, and no more cases of cholera had occurred on board either the Columbus, or the Vincennes. A few weeks before the Columbus arrived at Manilla, a French Frigate lost nine of her crew in the same port, and an American Merchantman, three or four.

Journalizing.—If any further proof were wanting of the rapid strides which New York is making, as the grand focus, centre, and theatre of medical education in this country, other than that furnished by the unexampled prosperity of its medical schools, it may be found in the rapid increase of periodicals devoted to the interests of medical science. For two or three years past, the "New York Journal of Medicine," with two or three reprints, were found adequate to meet the demands of the profession; but we now hear of several other journals, either already emerged to the light of day, or in that chrysalis state, when we may look for a full development at any moment.

The "New York Medical and Surgical Reporter," edited by Dr. C. T. Collins, has just completed the first year of its existence, forming a goodly sized volume of 420 pages, with a very copious index. This

periodical has received the support of several highly reputable physicians, and abounds in useful and interesting matter. The lectures of Dr. Swett on "Diseases of the Chest," as delivered at the New York Hospital, are worth twice the subscription price of the journal, and ought to find it a ready sale. The Editor has, we believe, satisfactorily fulfilled all that he promised; and though young in the profession, has gained no little reputation for honesty of purpose, and zeal in the cause of medical science.

The "Annalist" is designed to be a record of practical medicine in the city of New York, and is edited by our friend and worthy collaborator, William C. Roberts, M. D. Dr Roberts is well fitted by nature and education for the management of a medical periodical. He is not only learned in the literature of his profession, but a sound pathologist and practitioner. He, moreover, wields a ready pen, and has that sturdy independence of spirit, which is essential to one who undertakes to conduct a medical journal, with any satisfaction, in this city.

We need not add that we welcome our friend into the editorial field, and wish him all the success he so well merits.

—

Private Teaching in New York.—We would urge upon students coming to this city for the purpose of attending medical lectures during the ensuing winter, the great importance of entering the offices of those physicians who are engaged in the business of private instruction. They will find, that by a regular system of examinations and private teaching, they will be doubly profited by the able Lectures of the different professors, and carry away with them a much larger amount of useful, practical knowledge, than if they confined their attention merely to the lectures. Although we have not received any Circulars, we are informed that several highly accomplished Physicians and Surgeons will form Private Classes during the winter; among whom, we have heard mentioned the names of Drs. Van Buren and Isaacs, Detmold and Gray, Foster and Stone, and Dr. Whittaker; there may be others recently embarked in private teaching, whose names have not been made known to us, besides those whom we have formerly mentioned in the Journal. We need hardly add, that from personal acquaintance we can recommend all the above named gentlemen, as well qualified for the duties they have assumed.

Foreign Medical Intelligence.

PHYSIOLOGY.

Mechanism of Respiration and Circulation.—"The paralysis of the branches of the nervus vagus which are distributed to the lungs, is not the cause of the affection which developes itself in the lungs after the division of both nervi vagi in the neck.

"The excision of both nervi recurrentes causes the same affection in the lungs, though somewhat later, as the excision of the nervi vagi; from which it must be inferred that the paralysis of these two nerves, which ensues upon the excision of the two nervi vagi in the neck, is an essential cause of the above-mentioned affection.

"The conclusion of Longet, in his physiological resumé on the functions of the nervi vagi and recurrentes, that 'animals deprived of their recurrent nerves respire more quickly than in the normal state,' must rest upon false or misinterpreted facts, since my researches constantly prove the contrary.

"The preceding experiments and their results prove that the different functions which have been attributed to the branches of the nervus vagus going to the lungs, are erroneous; they also show that nothing more can be at present affirmed than that these branches bestow the sensation possessed by the mucous membrane of the bronchi, and that they contain motorial fibres for the bronchi.

"The phenomena resulting from the division of the nervi vagi, or recurrentes, consist of a retardation of the circulation, a dilatation of the capillary vessels, an exudation of plasma into the tissue of the lungs and into the air-cells, and of the usual metamorphoses of this exudation; they are, therefore, in all respects analogous to the process, which, in pathology, is termed pneumonia.

"The stasis of the blood in the capillary vessels of the lungs, which is the cause of the alterations above described, is, as such, not yet known, and all that is seen is the alteration produced by the loss of the influence of the vagus upon the lungs and their function, whilst the cause of the change is not determined. I have, however, seen the same alteration that is caused by the excision of the nervi recurrentes, produced by opening the cavity of the pleura, by injecting a thin fluid into the bronchi, or by introducing a hard body into one of the bronchial tubes. If, out of all these researches, we select that which is common, the law will appear—that the hindrance to the entrance of the air during inspiration, or more accurately, to the expansion of the air-cells, determines as a consequence a stagnation in the capillary vessels of the lungs.

"The preceding facts justify the presumption that the influence exerted by respiration upon the systematic circulation, which Poiseuille has determined, may be much farther extended than has heretofore been supposed; that, in fact, this influence, in virtue of a power which is generated in the lesser circulation by the expansion and contraction of the lungs, is communicated to the vessels running to and within the lungs; this presumption attains to certainty by experiments.

"The afflux or increased pressure of the venous blood towards the chest, and the diminished pressure of the arterial, is not determined, as

hitherto supposed, by the rarefaction of the air within the thorax and the corresponding augmented atmospheric pressure, but is the consequence of the suction (*aspiration*) exerted on the blood by the elongation of the pulmonary artery, together with its branches and the capillary vessels of the air-cells.

"The suction, which is exercised by means of the elongation of the pulmonary vessels upon the blood contained in the veins, constitutes also the mechanism by which the processes of digestion and nutrition are connected with respiration, inasmuch as the chyle and the lymph are, by means of the ductus thoracicus opening into the subclavian vein, brought under the influence of this latter process: the materials of nutrition are, as it were, pumped into the blood by means of the expansion of the lungs.

"If from the starting-point which has now been gained, the results of these experiments be once more regarded, it is easy to show why, after the section of the nervi vagi, of the nervi recurrentes, after the introduction of a hard body into the bronchus, after an opening into the pleural sac, a stagnation must arise in the lesser circulation, and as a consequence in the greater circulation also; in other words, how in these instances pneumonia is caused, whilst, after a narrowing of the air-tube, or after ligaturing the abdomen, only a stasis is determined in the greater circulation, whilst the lungs remain free.*

"The influence above described, which the expansion and contraction of the lungs exert upon the greater circulation, is the cause of the closing of the fœtal passages, of the alteration of the circulation, and of the hypertrophy of the left heart developed in the first week of life."—*A. Mendelssohn. Berlin*, 1845.

MEDICAL PATHOLOGY AND PRACTICAL MEDICINE.

The Natural History and Treatment of Wounds. By Isaac Gilchrist, M. D., of Woodside, Aberdeen.—(British and Foreign Medical Review.)

In the case of an external injury, we are invariably met with the demand, what application will heal or cure it; in former days they had sarcotic or flesh-creating ointments, and in our own days we have *healing cerates*, and other similar preparations without number.

Let us first inquire what Nature can accomplish in the matter of wounds; and then, how she may be aided in her operations. Dr. Macartney states, that as to the effects of injury in the different classes of animals, he found, "that the powers of reparation and re-production are in proportion to the indisposition or incapacity for inflammation, and hence that inflammation is so far from being necessary to the separation of parts, that in proportion as it exists the latter is impeded, retarded, or prevented;

* "If an opening be made into the pleura, and a communication with the external atmosphere be thus caused, the lung immediately collapses and no longer expands during inspiration. The lengthening of the vessels in virtue of which the blood is sucked into them out of the right ventricle, also ceases; and thus, one of the causes accomplishing the circulation in the lungs failing, the blood must move more slowly and with difficulty. The want of the power exerted by expiration also contributes to the same result; for, in the normal process, the air contained in the lungs is, by the force of expiration, so much compressed, as to acquire a density exceeding that of the atmosphere, and in this manner it exerts a general pressure upon the pulmonic capillaries and tends to empty them of their contents. The blood in the collapsed lung is propelled only by a power which is equal to a part of the contractile force of the right ventricle, the pressure, which normally is exercised by means of the motion of the lung, and thereby promotes the pulmonary circulation, being entirely absent. The vessels are in this condition pumped full of blood by the right ventricle, the dilatation of the capillaries and the exudation of a large portion of the plasma into the areolar tissue of the lungs and in the air-cells are the necessary consequence of the circumstances above described."

and that when inflammation does not exist, the reparative power is equivalent to the original tendency to produce and maintain organic form and structure; that it then becomes a natural function, like the growth of the individual or the reproduction of the species." This is quite different from the doctrine formerly taught under the terms *adhesive, suppurative, ulcerative, inflammations.* There is no countenance here given to Sir Astley Cooper's statement—"No wound can be repaired without inflammation."

Dr. Macartney describes the modes of reparation as follows:—1. Immediate union without any intervening substance, such as blood or lymph. 2. The union by the medium of coagulable lymph, or a clot of blood. 3. The modelling process, or reorganization without any medium of lymph or granulations, the cavity of the wound becoming obliterated by a natural process of growth. 4. The reparation by means of a new, vascular, and organized substance, called granulations. In the treatment of wounds, therefore, the great object of the surgeon must be to prevent inflammation, and thereby secure reparation by any of the first three modes; if he is successful in this object, granulation and suppuration, which go together, will be obviated. The following simple rules seem to embrace all that is necessary to facilitate nature's operations:—Approximate the edges of the wound gently and without much traction (after having cleaned it and removed foreign bodies); use as few stitches as possible; use as little adhesive strap as possible; apply a pledget of cloth soaked in cold water, and bandage loosely; inculcate absolute rest; preserve the part moist and cool, by the assiduous changing of cloths wrung out of cold water, and applied over the bandage; the part must not be allowed to become heated, so that for the first few days the cloths must be changed every two or three minutes, or a minute continuous stream must be directed on the part, by any of the simple processes recommended for the purpose. By the use of cold water dressings, incised wounds heal immediately, and lacerated wounds detach sloughs, and are repaired by the remodelling process without suppuration, at the same time presenting the most excellent cicatrix. In the latter kind of wounds, when poulticing is used, profuse suppuration is established, inflammation being excited by the hot, rancid, oppressive, irritating poultices, much of the previously sound tissues are wasted away, and the resulting cicatrix is rigid and puckered, and contracted.

We read that Hippocrates himself used water dressing most successfully, but that afterwards Celsus introduced a variety of absurd and complicated medicines. In the 14th century, the system of secret dressing was in fashion, each practitioner having a remedy which he considered universally applicable. When at a still later period water dressings were used, they were accompanied with incantations, to which the good effects were attributed. It is stated that Ambrose Paré, a pious but superstitious man, used the same application, but astonished at his extraordinary success, deemed the remedy nothing less than miraculous, and therefore not to be used by mortals, and accordingly he abandoned it.

This mode of treating wounds has received at my hands a very extensive trial, and has been followed with great success. I must, however, confess that I have had no inconsiderable difficulty in overcoming the prejudices of the people against so simple a method; and, in ordinary private practice, it is not unlikely I might have been obliged to discontinue it, or at any rate, substitute the usual mere formal perfumed lotions; but the nature of my appointments in connection with the extensive manufactories in this district, has enabled me to carry forward the simpler practice, and that, too, at least, to the entire satisfaction of the people themselves. Such prejudices are not confined to our locality, and have been, I fear, too much fostered everywhere by the more mysterious proceedings of the scholastic and orthodox practitioners. If this is so, we need be less astonished at the success of quackery, which is conducted upon similar principles. When we let all our patients see and comprehend

that we are treating them upon scientific and simple principles, then may empiricism prepare for its downfall without any interference on the part of government.

I shall conclude with a brief note of a few cases which have occurred recently, in illustration of the foregoing observations.

I. A man received an injury by the machinery in a large paper mill, which laid open the wrist-joint. The hand was half separated from the fore-arm, the tendons were torn, and the inferior end of the radius, which is naturally related to the carpus, was exposed. The arm and hand were placed straight upon a pillow, the wound was cleaned, and two stitches taken; a pledget of cloth soaked in cold water was applied, and a bandage rolled, not too tightly, round the hand, wrist and fore-arm; a large basin of cold water was placed conveniently by the bed-side, and directions left to apply freshly-soaked cloths over the bandage every two or three minutes, to prevent any heat or inflammation ensuing. No inflammation took place; the modelling process was uninterrupted, without suppuration, and an excellent cicatrix formed in little more than a fortnight.

II. A girl had the whole of the soft parts on the palm or surface of the four fingers, as it were, scraped off by the machinery of a flax mill; the tendons were torn, and the phalanges exposed at different places. Each finger was dressed as follows every day: being first bathed in cold water, a piece of soft cloth was placed round the finger, and a narrow roller to keep it applied: when the fingers were all thus dressed, a large cloth soaked in cold water was wrapped round them together, and changed as frequently as the slightest tendency to become heated appeared. The modelling process advanced steadily without suppuration, and cicatrization was completed in about four weeks. The fingers gradually acquired flexibility.

A great number of similar accidents have occurred among boys and girls employed in the cotton and flax factories in this district during the last six or seven years; and the same simple treatment has been adopted, so that, although obliged occasionally to amputate fingers in part or in whole, cases of very remarkable injury of soft parts of bones have recovered, and members have been saved, which, in all likelihood, would have been sacrificed by a treatment less calculated to prevent inflammation and suppuration. Flabby granulations are seldom seen, unless where the prevention of inflammation is carelessly attended to; so that caustic applications, astringent lotions, and stimulant ointments are not used.

III. A little boy had scrofulous disease of the bones of the ankle-joint, on account of which I amputated, by the flap operation, below the knee. Two stitches were used for two days; a strip or two of plaster, and cloths wrung out of cold water, were the sole applications. The wound was whole in a week. Other applications have been similarly treated, with equal success.

IV. A girl received a sharp instrument into the ball of the eye, at the Woodside works. The cornea and sclerotic coat were ruptured, the iris was lacerated, and prolapsus followed. Rest in bed, continued persevering use of cloths wrung out of cold water, and simple laxative medicine, constituted the treatment. The treatment was effectual in preventing inflammation, which was clearly the only indication in the case. The termination was as favorable as could be under such circumstances.

A multitude of cases might be recorded in this place in which the same simple natural treatment was adopted; but these instances suffice to show what Nature can accomplish herself, and the little we have to do to facilitate her operations.

On Typhoid Fever. By M. Bricheteau.—(Gaz. Med. Chir., from Medico-Chirurgical Review.)

M. Bricheteau has recently published some interesting papers upon this

subject, of which our limits, however, forbid any prolonged notice. He maintains that the history of the disease proves that, forty years since, the intestinal canal did not present the lesions now so commonly remarked, for these must have been noted by such observers as Bayle, Dupuytren and Laennec. It may be laid down as a principle, therefore, that *typhoid fevers, without absolutely changing their nature, present at certain epochs notable modification, sufficient to effect a change in their diagnosis and treatment.* An illustration of this is also derived from the fact of no such considerable changes being observed in the epidemic fevers of Great Britain and Ireland. Even in France such lesions are absent in some epidemics, and are in others nowise in proportion to the gravity of the symptoms; so that they cannot be considered the essential feature of the disease and its point of departure, although, from their dangerous character, they naturally have excited much attention.

M. Bricheteau observes that the contagious character of typhoid is not admitted in Paris, although believed in some of the provinces; but he is certainly in error in stating that the contagion of typhus is generally admitted in this country, and that a vigorous sequestration is consequently insisted upon. He is more correct as to the treatment which prevails here, for certainly the bleeding and antiphlogistics employed by many in Paris, would meet with few approvers in London. In explanation, he observes that inflammatory lesions are more common in Paris, as its climate is less debilitating than that of London. Sydenham, who had studied disease at Montpelier, acknowledged that his practice was too vigorous at the commencement of his career in London; and many other practitioners have observed that bleeding is much less easily borne in that capital than in Paris.

E. Bricheteau believes, however, that typhoid cannot be looked upon as a *phlegmasia*, inasmuch as neither the season of the year at which it occurs, the treatment it requires, the order of sequence of the abdominal symptoms, nor the measures which relieve these, favor this view. "By seizing on this inflammation as a basis of treatment, we commit the error of neglecting the cause for the effects of the disease." M. Delaroque, of the *Hôpital Necker*, and others, believe the symptoms of typhoid are due to the irritating effects of *vitiated bile and other secretions* which are thrown out upon the intestinal mucous membrane, and are then absorbed, poisoning the economy. Andral, Bouillaud, and Louis, are cited in proof of the enormous quantities of such secretions which are found after death, while the success of the purgative treatment pursued by M. D., is adduced in corroboration of this view. Other observers explain all the symptoms of typhoid by a primary *alteration in the condition of the blood.* The dissolved state of this fluid has been often observed by both the older and modern practitioners, and symptoms identical with those of typhoid have been induced by injecting putrid matters into the veins—the blood losing its plasticity as in typhus.

Conclusions.—The placing the seat of typhoid in the intestinal canal, the cerebro-spinal system, the blood or its secretions, seems to me of very little consequence, since this disease affects simultaneously or successively every portion of the economy. We find, first, the phenomena incidental to a disturbance of the nervous system, in which disturbance the circulation soon participates. Almost immediately afterwards, diarrhœa and other symptoms of intestinal irritation present themselves, as also the *râle*, which proves the pulmonary organs are not unaffected. Other symptoms soon show that the various secretions are either perverted or temporarily suspended. The affection seems to prevail in some degree everywhere, and to have its special seat nowhere. It is truly the *morbus totius substantiæ* of the old physicians. It is often epidemic, and sometimes contagious, presenting much analogy with many pestilential fevers, typhus, sweating-sickness, and intense epidemic influenza—diseases to none of which a precise seat can be attributed. It follows that the *treatment* of typhoid

should be mixed, being composed of measures as various as the lesions to be combated. Sometimes diluents and antiphlogistics, sometimes evacuants, at others alteratives, tonics, antiseptics, or sedatives, may be required. In fact, to adopt any exclusively curative method, would be to apply a determinate medication to an unknown pathological condition.

Urinary Calculus in the Pig.—Heller mentions having examined a urinary calculus taken from a pig. The stone was about the size of a musket-ball, very hard and mulberry-like; it was grey externally, but internally was white and amorphous. It was composed almost entirely of carbonate of lime, with a small quantity of phosphate of lime. There was no trace of uric acid or of urates in it.—*Archiv. für Chemie und Microscopie*, Heft. 1, 1846.

Paralysis of the Hands from the use of Crutches.—A woman has been admitted into the Hôtel Dieu, under the care of M. Guérard, with paralysis of both fore-arms and of the fingers of both hands, resulting apparently from pressure on the axillary nerves by the use of crutches for fourteen days. The paralysis began by a feeling of numbness. There was complete loss of sensation and of the power of motion in the affected parts, on admission; but by rest and the employment of blisters and strychnia for a few days, the fingers had regained a certain amount of their power. The case is still under treatment.—*Gaz. des Hôpitaux*, 18 Avril, 1846.

Necessity for Accuracy in Diagnosis.—A case is mentioned by M. Rostan, which affords a good example of how much the right treatment of a disease depends on a methodically conducted examination into all the particulars likely to bear on the affection. A female became the subject of an obstinate constipation. The first medical man who saw her suspected the existence of some inflammatory affection, and prescribed the application of leeches. No beneficial effects resulting from this plan of treatment, another physician was consulted, who ordered purgatives: these, however, produced only temporary relief, and a third medical man was accordingly summoned. He went more methodically to work in his endeavor to find out the real cause of the complaint; he examined the abdomen, and found an ovarian tumor, which was compressing the rectum, and so mechanically caused constipation. The position of the patient in bed was altered so as to relieve the rectum from pressure, and the bowels at once acted.—*Gazette des Hôpitaux*, Avril 18, 1846.

Mode of arresting Hemorrhage from Leech-bites.—Dr. Houston recommends the following plan for preventing excessive bleeding from leech-bites, which he has found invariably successful. Take a small pinch from the felt of a beaver hat, pile it on the bite; or if there be several points, pile one respectively on each, and spread over the whole a piece of thin muslin, drawing it tightly, so that any blood which flows must pass directly through both; then with a fine sponge drying up the blood as it oozes out, and in a short time both felt and muslin will have become dried by the coagulation of the blood in the thin fine meshes, and the hemorrhage arrested. The muslin may then be all cut away, except the adhering points, which, in the course of a couple of days, will of themselves drop off, leaving the parts healed, and free from any such disfiguring marks as those which necessarily follow cautery, caustics, or needles."—*Dublin Hospital Gazette*, March, 1845.

On the Non-mercurial Treatment of Syphilis.—By Dr. Scott. Dr. Scott made some observations on the importance which attaches to the history of Syphilis. No subject could be more full of interest, or prove more

clearly the necessity of strict investigation into what are considered the most established doctrines in medicine. Thirty years since there was no doctrine in the profession which was considered to be so well founded as the treatment of syphilis by mercury. In England none presume to differ from the opinion of John Hunter, that the disease was incurable without mercury, and not only that the medicine was required to remove the disease itself, but that to cure the disposition to it, and to secure the constitution from its ravages, an extended course of mercury was required. Sir Benjamin Brodie still retains this opinion; and Dr. S. observed that he would not have probably called the attention of the Society to this subject, had he not observed, in the lately published Essays by Sir Benjamin, some remarks, which, from so high an authority, appeared calculated to lead to what appeared to him an injurious line of practice. Every now and then a dissenting voice had been raised against the mercurial doctrine, but the profession in general adhered to the opinion of John Hunter.

Heberden considered it as one of the four specifics discovered in medicine. Allusion was made to the remarkable paper of Dr. Fergusson in the Med. Chir. Trans. of 1813, and the observations made by him on the disease, as it appeared in Portugal, and the opinion of the German physicians.

Sir Benjamin Brodie, in mentioning the work of Mr. Abernethy on Pseudo-Syphilis, considers that the illogical conclusions and extraordinary assumptions contained in it have much diminished the value of this part of his writings. This work of Mr. Abernethy, Dr. S. considered a most useful one, as having led the way to the investigation from which such important results have been derived. Dr. S. then related his personal experience. In 1813 he was placed for a short time in Colombo, in charge of the venereal wards, in which the cases were all treated with mercury. Many of them he found were well in a few days, others in five or six, others in three weeks, periods too short to warrant the conclusion that they were venereal; they were therefore set down as cases of pseudo-syphilis. The number of these cases increased with the field of experience, and in a few years the use of mercury was gradually resigned in almost every case of local disease. The secondary symptoms were few and slight, and never required an extended course of mercury. The same plan of treatment was also adopted with them, and in a few years Dr. Scott, then garrison surgeon at Point de Galle, entirely abandoned the use of mercury. The inference which he drew, however, was, not that the venereal disease was curable without mercury, but that the real disease did not exist in Ceylon. Dr. S. then described the miserable victims who were constantly found in military hospitals at that time, affected by extensive ulcerations, nodes, &c., who furnished a considerable number of the invalided and many deaths. Since mercury was abandoned, such cases have disappeared from the hospitals. In 1818 and 1819, Dr. Scott became acquainted with the results of the investigation which had been carried on in England, and since that time had entirely abandoned the use of mercury as a specific. He had found many cases in which it was required as an alterative. After some remarks on laryngeal ulceration, diseases of the bones, &c., which are still met with in practice, Dr. S. stated that he considered every case of local disease to be curable without mercury, and that under such treatment the secondary symptoms, when they did occur, were slightly and easily managed. In fact, the disease ran a certain course, modified by peculiarities of constitution, and required only the treatment adapted to such modifications. Dr. S. drew a contrast between two cases of secondary symptoms which had been under his care at the same time, of young men of the same age, and of irritable and unhealthy constitutions. Both were severe cases, but in one the patient recovered in two months, while the other, after many narrow escapes,

could only be pronounced cured after the lapse of a year from the first attack.

Dr. Maclagan expressed his satisfaction that Dr. Scott coincided in the views Dr. M. had long entertained on this subject. His confidence in mercury as a specific in syphilis had been first shaken when, after he was a graduate in medicine, he attended for some months the Lock Hospital in London, under Mr. John Pearson. There, every variety of form in the disease presented itself, but in very many cases seemed to be aggravated, rather than benefited, by the mercurial treatment; and though Mr. Pearson, in his lectures, and in his conversations with his more advanced pupils, still advocated the necessity for mercury in the cure of syphilis, he often expressed his doubts whether in many constitutions the use of mercury had not been more injurious than beneficial. While afterwards serving with the army in the Peninsula, and in charge of a Portuguese brigade, he had also been much struck with the apparent success which attended the treatment of the primary forms of the disease in the Portuguese soldier, by topical remedies alone, or merely with the additional use of Lisbon diet and drinks, and sometimes without either. He saw none of those cases of secondary symptoms in an aggravated form, to which his late lamented friend, Dr. William Fergusson, has alluded in his paper in the Transactions of the Medico-Chirurgical Society of London, but Dr. M. was then disposed to attribute the success of the non-mercurial treatment among the Portuguese to some peculiarity in the climate, and in the constitution and habits of the natives, which he afterwards had occasion to remark in a very different disease, Traumatic Tetanus, which, with few exceptions, assumed a less fatal form among the Portuguese wounded than among the British. On his return to Edinburgh, after the peace, Dr. M.'s attention had again been directed to the subject by the opinions long expressed by his early teacher Professor Thomson, and by the opportunities of seeing the practice in the Depôt Hospital in Edinburgh Castle, under Dr. Thomson's charge, as well as in that, and in Regiment Hospitals, under Dr. Hennen, Mr. Johnston, and Dr. Bartlett of the 88th regiment, the latter of whom published an excellent Thesis at his graduation on the non-mercurial treatment. This treatment had also been adopted in the practice of Staff-Surgeon Guthrie, and in that of Mr. Rose of the Coldstream Guards, and since very generally and successfully throughout the army. Since 1818 Dr. M., with a few exceptions where the patients' scruples afford full explanation, demanding its modified use, has adhered to the non-mercurial plan of treatment both in dispensary and in private treatment, and in no one instance has had reason to regret it. Many who were then so treated are his patients still, fathers of families enjoying, as well as their offspring, excellent health, and without the occurrence in the period that has elapsed of any secondary symptoms of an aggravated form. On the other hand, he has seen too many cases where the use of mercury to its full extent has been productive of constitutional injury of the most serious character.

Dr. D. Maclagan alluded to the success which attended the practice of Dr. Fricke in Hamburgh, and Professor Krukenberg in Halle, in corroboration of the benefits of the non-mercurial system of treatment.

Dr. Bennett stated, that the last account of Dr. Fricke's practice, with which he was acquainted, is to be found in Sir Alexander Crichton's Commentaries on Medicine. This treatment had been tried on a large scale in the various garrisons of France, Germany, and Sweden, and reports had been given to the various governments, amounting altogether to upwards of 80,000 cases, the general results of which were quite in accordance with the experience of Dr. Scott. He thought that one of the best evidences of the non-mercurial treatment existed in the fact, that those dreadful secondary and tertiary cases which were formerly so common, are now seldom met with, and that pathological specimens of syphilitic

bones, although common in museums, are at present scarcely to be obtained.

Dr. R. Mackenzie was of opinion that the observations which had been made were directed rather against the abuse than the use of mercury. As surgeon to the Lock Hospital of Edinburgh, he had seen many cases where the sores, however obstinate, had at once improved in character as soon as the constitution was affected with the drug. He alluded to two cases especially, in which this was observed, where mercury was given for iritis, but in which obstinate chancres on the genitals also began to heal as soon as the medicine produced its physiological effects.

Dr. A. D. Campbell stated that mercury was also necesssry in the syphilitic eruptions of children.

MIDWIFERY.

On Incision of the Neck of the Uterus in cases where, from contraction of the Organ, Delivery is difficult. By Dr. Labordie.—The author commences his paper by stating, that whilst in many cases the progress of labor appears to proceed naturally, the membranes having ruptured, and the pains succeeding each other regularly, yet the os uteri does not dilate, and labor is indefinitely retarded. The woman being otherwise well formed, it is evident the obstacle to delivery is sought for in the cervix, which being rigid, does not yield to the contractions of the body of the uterus itself. In general, simple means, such as bleeding, baths, emollient and narcotic injections, are found sufficient to overcome this state of rigidity. But in a certain number of cases these means are insufficient, the labor is lingering, and the life both of mother and child is in danger. It is in such cases that incision of the neck must be had recourse to, in order to induce dilatation, and this has now been so often performed, as to rank as a legitimate operation.

Three cases occurring in the practice of M. Dubois are detailed by M. Labordie; to one of these we invite the attention of our readers, as the operation was followed by a result not usually met with.

A young well-formed girl was admitted into the Clinical Hospital in the month of June, 1844. She had suffered from hemorrhage at various times during the course of her pregnancy. On the 6th the pains of labor commenced, and continued during the whole day. In the evening the membranes burst, the neck was thick and rigid, and the os uteri dilated to the extent of two centimetres.

On the morning of the 7th, a face presentation was recognized. The cervix was still rigid, but dilatation had advanced to the extent of three centimetres. Although the woman was much weakened, M. Dubois still deemed it prudent to allow things to take their course without interference. At half-past one, labor having made no advance, and the patient being much exhausted, incision of the cervix was then determined on. One incision made in the right side produced slight relaxation, but was followed by no other consequence worthy of remark. A second was immediately practised on the left side, but scarcely had it been done, when there ensued a copious hemorrhage of bright red blood. M. Dubois had immediate recourse to the forceps, but could not apply them, owing to the rigid state of the cervix; he was equally unsuccessful with the lever. Injections of cold water were then had recourse to, but without effect in stopping the hemorrhage. The woman was now so exhausted that it was necessary to plug the vagina. The bleeding was thus stopped, but the patient continued in a state of extreme distress, and delirium supervened. Nevertheless the plug was removed in the course of half an hour; dilatation had now become sufficient, and labor was terminated by the forceps. All the unfavorable symptoms ceased, and the woman soon recovered.

Mr. L. remarks that cases of this kind are of rare occurrence, so much so, that M. Dubois had never met with one similar. He conceives that it must have been owing to the placenta being inserted near the mouth of the uterus.

The following rules laid down by M. L. as to the mode of operating are so important, that we give them *verbatim*:—"We have seen," he says, "M. Dubois have recourse sometimes to the knife, sometimes to the scissors, in order to relieve the stricture at the mouth of the uterus. M. Danyau, on the other hand, invariably uses the scissors. Should a preference be given to one or other of these instruments, or may they be used indifferently?

No decided answer can be given to the question, for either of them may be had recourse to, according to circumstances, and according to the spot at which it is necessary to relieve the stricture. As a general rule, however, we should not hesitate to employ the bistoury, provided the cervix be not displaced; and we should choose that form of bistoury employed in removing the amygdalæ. When it is wished to practise an incision, either to the left, or anteriorly, or posteriorly, the index finger of the left hand must be introduced into the vagina, and its palmar surface applied to the spot where it is desired the incision should be made. The bistoury must then be introduced by means of the right hand, its flat surface sliding along the surface of the index of the left, until its point, passing within the cervix, comes to be in contact with the end of the finger. By means of a semicircular motion, the cutting edge of the instrument must then be directed perpendicularly towards the free edge of the orifice; should the latter be tense, the incision will be most readily executed, by giving to the instrument a sawing motion. We recommend all surgeons to limit the incision to the extent of a centimetre, conceiving it preferable to multiply them, should the desired result not be produced. If the incision be made to the right, the right hand must be used as a guide to the instrument.

When the cervix lies far back, it is impossible to use the bistoury for the purpose of relieving its posterior lips; in such a case, recourse must be had to the scissors. The mode of operation is nearly the same; but in order to insure that the incision does not go beyond the extent of a centimetre, a most careful examination must be made by means of the finger. The scissors are also applicable in case of retroversion, when the anterior lip has to be relieved, as well as for lateral incisions, in those cases in which the cervix lies very much to the right or left. It will be readily conceived, that in all such displacements, the most elevated edge of the orifice would be reached with difficulty by the bistoury, as its point would be in danger of coming in contact with the walls of the uterus, and wounding them. If the use of the scissors be entirely prohibited, a bistoury with a very convex cutting edge must be made use of.

The operator can, in general, immediately ascertain the effects of his incision; the cervix, from being hard and resisting, becomes more pliable. The influence of the operation should be particularly watched during a pain; it will then be found, that the head of the child, pressing strongly on the orifice, advances more perceptibly than before. The dilatation, in a quarter of an hour after the operation, is generally sufficient to permit of the application of the forceps, should it be thought desirable to terminate the labor in that way. But should this not be the case, new incisions must be had recourse to. M. Dubois affirms that he has never failed in accomplishing his end by following these precepts.

There is one counter-indication to the operation, which we wish particularly to specify, and that is, thickening of the cervix. When the latter has not become thin, the operation, instead of being of advantage, may be the very reverse. In this latter case, hemorrhage is most to be feared; but the incision over such an extended surface may also be the primary cause of laceration so extensive as to prove fatal.

Attachment of the placenta, near the cervix, may, from what we have previously stated, be also held as a circumstance sufficiently serious to forbid the operation."—*Encyclographie Médicale*, April, 1846.

Use of the Black Oxide of Mercury in the vomiting of Pregnancy.—M. Stackler has announced that he has found the black oxide of mercury a most useful medicine for removing the obstinate vomiting which sometimes occurs in females during pregnancy. The vomiting was checked in two cases of unusual severity, by doses of oxide, equal to five centigrammes daily (=0·77 grains). No unpleasant effects were observed to follow the use of the medicine. There was no salivation. Doctor Jouger has found the oxide equally beneficial in hysteric convulsions, and in cases of uterine irritation.

—

Subnitrate of Bismuth in Gastralgia.—Dr. Bertini, of Turin, has lately employed this medicine in numerous cases of gastralgia, beginning with a dose of five centigrammes ($\frac{5}{100}$ = 0·77 grains), and gradually raising it to twenty centigrammes = 3·08 grains. It was mixed with calcined magnesia, and given three or four times a day. In most instances the neuralgic pains disappeared under the use of this medicine; and in cases where the gastralgia appeared to be connected with organic disease, the symptoms were always much alleviated.

—

Mode of using Quinine.—Dr. Mendenhall (*Am. Jour. Med. Sci.*, July, 1846) makes the following observation on the best mode of administering quinine in fever:

Patients are generally very anxious to have the paroxysms broken up, and it is, therefore, desirable to commence the use of quinine as early as possible. When doubt existed as to the propriety of using it, it might often be given combined with some diaphoretic; and of these the sweet spirits of nitre is one of the best, if not the very best. I always use it unless there is the most perfect certainty that quinine will be tolerated without the unpleasant symptoms spoken of. I was first led to its use by the recommendation of Professor Chapman, in his lectures ten or eleven years ago, and I have been highly gratified with the result. I am confident that I have, by conjoining it with quinine, broken up cases of chills and fevers, in feeble and debilitated patients, particularly, where the febrile state ran on without any great abatement, until the commencement of the succeeding chill that must have succumbed to the effects of the repeated paroxysms. But in these cases the preparatory treatment had been instituted, the fever was moderated, the tongue was somewhat cleaned, the secretions were generally more or less restored, and the only indication remaining to be fulfilled, was the interruption of the debilitating paroxysms. It was these paroxysms which were wearing the patient out, and not the local determinations, for they were removed. This combination of a diaphoretic with quinine often has the happiest effects; it appears to determine, in a great measure, the excitant effects of the quinine to the secretory action of the skin, and what, under other circumstances, might have produced dryness and heat of the surface, results in a profuse perspiration like the sweating stage of an intermittent. Here, instead of coinciding in its effects with the disease, a crisis is forced upon it, and the train of morbid associations is broken up.

—

SURGERY.

Operation for Aneurism.—The following conclusions, as the result of his experience in operations for aneurism, are drawn by Mr. Guthrie, in a lecture delivered by him at the Royal Westminster Ophthalmic Hospital:—

1. That the theory of the operation of aneurism, as dependent on the collateral circulation, cannot be applied with safety to spurious aneurisms of recent occurrence dependent on wounded arteries.

2. That it is inapplicable to wounded and bleeding arteries.

3. That the length of time a spontaneous aneurism has existed is of consequence, as connected with the collateral circulation; although an

aneurism should never be allowed to attain that size which may render it injurious to the surrounding parts.

4. The collateral vessels are at all times and under all natural circumstances capable of carrying on the circulation in the upper extremity, whatever disease or injury may affect the principal trunk, provided a due degree of care be taken to maintain the temperature of the part. Whenever the reverse takes place, it is an exception to the general rule.

5. After operations for aneurisms in the lower extremity, the collateral branches are almost always equal to carry on the circulation through the limb.

6. When the principal artery of the lower extremity is suddenly divided, without any previous disease having existed, mortification is not an uncommon occurrence, and is more likely to take place in old than in young persons.

7. When under such circumstances the principal vein is also divided, mortification seldom fails to be the consequence.—*Medical Times.*

—

Operating for Varicose Veins.—There are indeed no circumstances here to justify the performance of a dangerous operation. You may perform such operations to get rid of a disease still more dangerous, but you have no right to perform an operation attended with such a degree of danger as can be appreciated, in order to get rid of a disease which is not dangerous; and no one can say that varicose veins belong to the class of dangerous diseases. But still there is another reason against having recourse to this operation. I do not believe, from what I have formerly seen, that it permanently benefits the patients. It is true that they appeared to go out of the hospital much relieved; but where I had the opportunity of seeing them one or two years afterwards, I always found them as bad as ever. Indeed I am by no means certain that the benefit which the patients appeared to derive, in the first instance, was the result of the operation; and I am more inclined to believe that it arose from their having been necessarily kept for some time in bed in the horizontal posture. Patients with varicose veins always seem to improve under these circumstances. But I may observe further, that there appears to be no reason why, in ordinary cases of varicose veins, the obliteration of the *saphena* should do any good, and that there are better grounds for believeing that it will do harm. I have already explained to you that pressure on large venous trunks causes an obstruction of the blood in passing through them, and that this is one common cause of varices."—*Sir Benj. Brodie.*

—

Mr. John Goodsir has been elected Professor of Anatomy in the University of Edinburgh. The well-known reputation of this gentleman as an anatomist, physiologist, and assiduous cultivator of comparative anatomy and natural history, renders this an appointment which cannot fail to give satisfaction.

M. Sedillot has been elected a corresponding member of the Academie des Sciences, Paris, in the section of Medicine and Surgery.

The colleagues and pupils of Dr. Billing at the London Hospital, have presented to him, on the occasion of his retirement from that institution, a massive and highly ornamented piece of plate, with an appropriate inscription.—*Prov. Med. and Surg. Jour., May,* 1846.

Elephantiasis.—Elephantiasis, judging from the number of cases casually seen, is as common here (China) as at Rio de Janeiro, or even at Barbadoes, where it is so prevalent as to have given rise to one of its names—*Barbadoes-leg*. It is generally, and there is reason to believe justly, considered as an endemic disease in the proper meaning of the word. Yet, on examining the topographical and appreciable climatorial constitution of the three places, few points of agreement can be discovered between them, though in some peculiarity of these things, in conjunction with the modes of living and personal practices, the causes of endemic diseases must consist. In the latter particulars, it is true, in diet and domestic management, there is considerable similarity between some classes of persons, in the positions named. Both at Rio de Janeiro and Barbadoes, elephantiasis prevails principally among the negroes, who, like the poorer Chinese, subsist almost exclusively on vegetables, with a portion of salted fish. Like them, they are also very often dirty in their persons, their cabins, and their clothes. These things may have much influence in producing the disease, but it is evident that they are not of themselves sufficient; for other classes and races of men, who feed as poorly, and are not more cleanly, are not affected by it.

Respecting the nature and rational treatment of elephantiasis, there is fortunately less doubt than on the subject of its origin. It consists essentially in inflammation of the sub-cutaneous cellular tissue, which leads to effusion, the effused matter becoming imperfectly organized, occasioning tumefaction, and impairing more or less the motive power of the limb. Repeated attacks of inflammation, effusion, and consolidation, produce, if not arrested, in the course of time, generally many years, the highly enlarged, tuberculated, scaly leg, resembling very closely that of an elephant. As the disease advances, the functions of every tissue, especially of the skin, ligaments, and bones, are injured or destroyed, by increasing pressure, till, beginning with the separation of the toes, disorganization proceeds to a fatal issue.—*J. Wilson, Notes on China.*

Phosphate of Ammonia in Rheumatism.—(Medical Examiner, July, 1846.) Dr. Hartshorne reports several cases treated with this remedy; the following are his conclusions. The medicine was given in doses from 10 to 30 grs. three times per day.

The powers of the remedy were fairly tested in the Pennsylvania Hospital,—and the result may be deduced from a short statement of each case. It will be seen that it has proved no *specific*, although several of the cases recovered. Additional treatment was used generally,—as Dover's powder at night, the warm bath, cupping, blisters dressed with morphia, and mercurial ointment combined with narcotics, veratria ointment, &c. These may perhaps claim much of the credit of the cures, which were mostly very low.

In all these cases, twenty and thirty grain doses of the salt procured some laxative effect upon the bowels,—in one, a painful diarrhœa; and in another, diarrhœa, vomiting and indigestion, were brought on after using twenty grains thrice daily, for several days. Two patients had very little effect produced upon their bowels. No increase of urine was, upon inquiry, ascertained in any of them.

The phosphate has been used in a dozen or more cases, by my father, Dr. Joseph Hartshorne, with such advantages as incline him to think it may be a valuable addition to our means of treatment of rheumatism, though by no means as a specific remedy.

In the tardiness of cure, and repeated failure among the cases above reported, we see the proof that it has no such peculiarity or certainty of action; and that the plausible theory of Dr. Buckler is as yet unconfirmed. It is a question whether now, if ever, we can hope so clearly to unriddle the subtle chemistry of the animal fluids. But the known acid condition of the secretions in rheumatism, makes alkalies and alkaline salts a natu-

ral indication; laxatives are also called for; and this medicine has both these qualities. The degree of success with it, or at least the number of *coincident recoveries*, is also enough to justify more extended trials, although there is nothing, as yet, to induce us to suppose it can supersede the colchicum.

—

Extirpation of the Lachrymal Gland.—This gland is subject occasionally to simple interstitial enlargement, requiring its removal. Dr. Halpin thus describes his mode of performing the operation in the *Dublin Quart. Jour. Med., Feb.*, 1846:—

"In operating in this case, I determined to avoid wounding the eyelid, thinned, discolored, and traversed by large veins. I drew down the tumor with the fingers of my left hand, until I had about one-half of the eyebrow below the edge of the lupuciliary ridge. Mr. Brice then fixed the integuments against the forehead. In order to insure the largest possible space after the dissection of the gland from its deep attachments, I swept round nearly two-thirds of the orbit with my first incision, which commenced immediately above the tendon of the orbicular muscle, and terminated half an inch below the external commissure. In this course, I divided the eyebrow through its entire length, leaving about two-thirds of its breadth on the forehead; the ligamentum palpebranum was then divided. The flap was next dissected down; and ample room was obtained; a ligature was passed through the gland, and it was dissected entire, partly with the index finger of the right hand, and partly with the scalpel, from its deep connections. There was no hemorrhage. The edges of the divided eyebrow were now brought together by four points of interrupted suture; the patient was put to bed, and the cold water dressing applied. Union by the first intention took place along the entire line of incision. Seven days after the operation, he was able to return home—the eye-ball gradually regained its normal position; at the end of four weeks there was no deformity to be observed, and the line of incision scarcely perceptible. The eye-sight continued good. What is remarkable, the patient did not experience any unusual dryness of the eye-ball after the operation; and tears bedewed the eye, on the application of any irritant to the conjunctivæ.

INDEX TO VOL. VII.

A.

	Page
Anatomical Blistering Ointment,	129
—— Subjects, preservation of,	269
Aqua Prunus Virginiana, Formula for,	103
Army and Navy Surgeons,	91
Adulteration of Iodine,	129
Alexander (T.), Hydatid Cyst of the Liver,	332
Arthur, R., on the Teeth,	85
Aneurism, operation for,	423
Assimilation of Amylaceous and Saccharine substances,	278
Asiatic Cholera,	143
Association of Medical Superintendents of American Institutions for the Insane,	108
Ayres, case of Ulcer of the Gall-Bladder,	315

B.

Batchelder, cases of Tumors,	27, 200
—— Thoughts on the Connection of Life, Mind and Matter,	88
Baltimore College of Dental Surgery,	406
Bliss, J. C., on Abortion,	377
Beck (J. B.), on Effects of Emetics in the Young Subject,	153
Beck, L. C., Adulterations of Medicines,	344
Bennett, H. N., case of Ovarian Disease,	189
Biography of Dr. Lovell,	403
Bigelow (H. J.), Fragments of Medical Science and Art,	83
Bloody Tumor, or Thrombus of the Vulva,	122
Bricheteau on Typhoid Fever,	416
Black Oxide of Mercury, in vomiting of pregnant women,	119
Brodie (B. C.), Clinical Lectures on Surgery,	63
Bromide of Potash, in Secondary Syphilis,	287
Browne, Trees of America,	265
Bulkley, Varioloid complicated with Erythema,	17
—— Case of Herpes Iris with cases,	48
Buck, Fracture of the Vertebræ and Paraplegia,	20
—— Excision of the Elbow Joint,	38
Burke, on Mineral Springs of Western Virginia,	253

C.

Page
Carr (E.), Cases of Encephaloid, - - - - - - - - 295
Case of Poisoning by Camphor, - - - - - - - - 130
—— —— by Strychnia, - - - - - - - - 130
—— Placenta Prævia, - - - - - - - - - 120
—— Salivary Calculus, - - - - - - - - - 113
—— Tetanus treated by Canabis Indica, - - - - - 109
—— of Self-Emasculation, - - - - - - - - 111
Carpenter's Elements of Physiology, - - - - - - - 252
Caoutchouc in confirmed Phthisis, - - - - - - - 117
Carbonic Acid exhaled by man in health, - - - - - 278
Celebration of the Birth-day of Pinel at Utica, - - - - 109
Charter of N. Y. Medical Society, - - - - - - - 409
Cholera in London, - - - - - - - - - 288
—— on board U. S. ship Columbus, - - - - - - - 411
Chronic Capillary Bronchitis, - - - - - - - - 155
—— Rheumatic Arthritis of the Toes, - - - - - - 115
Clymer, M., on Fevers, - - - - - - - - - 253
Coventry, C. B., on Proceedings of State Medical Society, - - 192
Conception occurring after inversion of Uterus, - - - 282
Compensations of Physicians at Coroner's Inquests, - - - 400
Composition of Brocchieri Water, - - - - - - - - 129
Curiosities of Medical Literature, - - - - - - - - 144

D.

Digitalis, mode of ascertaining the efficacy of, - - - - - 129
Dispensary Reports, - - - - - - - - - - 92
Damages recovered by a nurse diseased by a Syphilitic Infant, - 138
Dublin Quarterly Journal of Medicine, - - - - - - - 94
Dowler (B.), on Quarantine in Louisiana, - - - - - - 159
—— on Yellow Fever, - - - - - - - - - 271
Dewees, H. P., on Masked Intermittent, - - - - - - 348
Diabetes, treatment of, - - - - - - - - - 281, 287
Dickson, S. H., Essays on Pathology and Therapeutics, - - 257
Digestion and Nutrition in Herbivorous and Carnivorous Animals, 278
Draper, J. W., Text-Book of Chemistry, - - - - - - 394
Dunglison (R.), Dictionary of Medical Science, - - - - - 82
—— General Therapeutics and Mat. Med., - - - - - - 392
—— Human Physiology, - - - - - - - - - 392

E.

Elephantiasis, - - - - - - - - - - - - 425
Elliot (A. G), Case of Fœtal Deformity, - - - - - - 45
Extraction of a Five-franc piece from Œsophagus, - - - 127
Extracts and Plasters, to preserve from mould, - - - - 287
—— from Records of New York Med. and Surg. Society, - - 354
Extirpation of the Lachrymal Gland, - - - - - - - 426

F.

Page
Fell, J. W., cases of Tetanus cured by strychnine, - - - - 370
Flooding, - - - - - - - - - - - - - 285
Fordyce, G., on Fever, - - - - - - - - - - 255

G.

Gastralgia, Sub-nitrate of Bismuth in, - - - - - - 423
Geological Meeting, - - - - - - - - - - 276
Green on Diarrhœa occasioned by Nit. Silver, - - - - 19
Gunn, M., Ganglionic System of Nerves, - - - - - 327
Horner, U. S. Dissector, - - - - - - - - 393
Harris (C. A.), Valedictory Address, - - - - - - 89
Health of the Army on Rio Grande, - - - - - - 402
—— in the Willamette Valley, - - - - - - - 109
Hasse, C. E., Pathological Anatomy, - - - - - - 395
Homœopathy and Dr. Forbes, explanation, - - - - - 139
Henderson, Inquiry on Homœopathy, - - - - - - 79
Hoblyn (R. D.), A Manual of Chemistry, - - - - - 89

I.

Inversion of Uterus, and death of the Patient, - - 120
Influence of temperature on the Respiration of Warm-blooded Animals, - - - - - - - - - - 114
Intestinal Worms, Frequency of, in China, - - - - - 281
Induction of Premature labor by Galvanism, - - - - 283, 284
Infusion of Honey Bees, - - - - - - - - - 267
Johnson, James, on Tropical Climates, - - - - - - 81
—— E., Results of Hydropathy, - - - - - - - 257

J.

Journalizing, - - - - - - - - - - - 411

K.

Kirby and Spence, Entomology, - - - - - - - - 256
Knight, J., Address on National Medical Convention, - - - 398

L.

Leech Bites, mode of arresting hemorrhage from, - - - 418
Lead Colic, Treatment of, - - - - - - - - - 280
Le Conte (J. L.), on a new species of Urinary Concretion, - - 172
Leger, T., on Animal Magnetism, - - - - - - - 256

Page
Ligature of the Left Subclavian Artery, - - - - - - 270
Little (S.), A Manual of Diseases of the Eye, - - - - 90
Lovell, J., Eulogy on, - - - - - - - - - - - 403

M.

Mechanism of Respiration and Circulation, - - - - - 413
Medical School at Buffalo, - - - - - - - - 402
—— Education in Philadelphia, 1772, - - - - - - 105
—— Schools, - - - - - - - - - - - 266
—— Appointment (J. Le Conte), - - - - - - - 269
Monell, Typhoid termination of Acute Inflammation, - - 216, 335
Minutes of National Medical Convention, - - - - - 98

N.

New Formulæ, - - - - - - - - - - - - 286
New York Society for the Relief of Widows and Orphans of Medical Men, - - - - - - - - - - - - 267
New York Lyceum of Natural History, - - - - - 265
New mode of arresting Obstinate Singultus, - - - - - 119
—— Epidemic, - - - - - - - - - - - 270

O.

Obituary, - - - - - - - - - - - - - 266

P.

Philips on Scrofula, - - - - - - - - - 240, 383
Phosphate of Ammonia in Rheumatism, - - - - - 425
Plica Polonica of Vegetable origin, - - - - - - 287
Prosecution for Mal-practice, - - - - - - - 406
Preliminary Education, - - - - - - - - - 402
Pereira, J, Materia Medica and Therapeutics, - - - - 393
Proceedings of Annual Convention of Connecticut State Medical Society, - - - - - - - - - - - 395
Purple, S. S., on Corpus Luteum, - - - - - - 304
Placenta, Structure and Functions of, - - - - - 277
Periodic Cough of Children, - - - - - - - 116
Poisoning by Arsenic, - - - - - - - - - 287
Prize Essay of Louisiana Medico-Chirurgical Society, - - 107
Preservation of Lunar Caustic, - - - - - - - 130
Policy of Life Insurance vitiated by Concealment of Hernia, - - 131
Progress of Science, - - - - - - - - - 144
Proudfoot, L., cure of Compound Fracture of Tibia in Utero, - 199
—— Excision of Tendons of Leg, - - - - - - - 346

Q.

Page
Quinine, mode of using, - - - - - - - - - 423
Quarantine in Philadelphia, - - - - - - - - - 410

R.

Report on Quarantine Laws, - - - - - - - - 217
Ritter on the Nature and History of Varioloid, - - - - 115
Rectum, Stricture of, - - - - - - - - - - 405
Rodgers (J. K.), Operation on Left Subclavian Artery, - - - 102
Royal Estimate of the value of Medicine, - - - - - - 106

S.

Syphilis, Non-mercurial treatment in, - - - - - - - 418
Society for Relief of Widows, &c., of Medical men, - - - 409
Structure of Bone, - - - - - - - - - - - 114
Shattuck, L., Report on Census of Boston, - - - - - 76
Smith (C. D.), Report on Cutaneous Diseases, - - - - 20
Simon's Chemistry of Man, - - - - - - - - - 257
Southern Journal of Medicine and Pharmacy, - - - - 93
Statistics of Paris Hospitals, - - - - - - - - - 144
Stewart (Campbell), Mercurial Stomatitis terminating fatally, - 20
Sulphuric Ether, Effects of, applied to mouth and fauces, - - 286
Suit for an Alleged Libel, - - - - - - - - - 107
Sulphate of Quinine, new mode of administering, - - - 285

T.

Ticknor (L.), on Surgical Education, - - - - - - - 183
Tincture of Aconite, preparation of, - - - - - - 287
Trial for attempt to procure abortion by Hellebore, - - - 136
Twins born at an interval of two months, - - - - - 120
——, Uterine Inertia, with second child, - - - - - 282

U.

Uterus without Os Tincæ, - - - - - - - - - 407
——, incision of neck of, - - - - - - - - - 421

V.

Variola modified by Vaccine, - - - - - - - - 118
Varicose Veins, operating for, - - - - - - - - 424

W.

Water Quackery in 1736, - - - - - - - - - 108
Willard, Mrs. E., on the Motive Powers of Circulation, - - 233
Wilkes on Purpura, - - - - - - - - - - - 17

Page
Williams on Indigenous Botany, - - - - - 33, 175, 321
Wotherspoon on the Medical Topography of Fort Kent, Me., - 17
Wounds, Natural History and Treatment of, - - - - 414

Y.

Yellow Fever in Vera Cruz, - - - - - - - - - 104
—— ——, - - - - - - - - - - 271

Z.

Zabriskie on Tetanus, Allopathy, and Homœopathy, - - - 169